POLICIES FOR HUMAN CAPITAL DEVELOPMENT
AZERBAIJAN
AN ETF TORINO PROCESS ASSESSMENT
Disclaimer
The report was prepared in the framework of the Torino Process 2018-20 by Abdelaziz Jaouani, Margareta Nikolovska, Mihaylo Milovanovitch and Susanne Nielsen, ETF.

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PREAMBLE

The European Training Foundation (ETF) assessment provides an external, forward-looking analysis of the country’s human capital development issues and VET policy responses in a lifelong learning perspective. It identifies challenges related to education and training policy and practice that hinder the development and use of human capital. It takes stock of these challenges and puts forward recommendations on possible solutions to address them.

These assessments are a key deliverable of the Torino Process, an initiative launched by the ETF in 2010 aimed at providing a periodic review of vocational education and training systems in the wider context of human capital development and inclusive economic growth. In providing a high-quality assessment of VET policy from a lifelong learning perspective, the process builds on four key principles: ownership, participation, holistic and evidence-based analysis.

Human capital, in this context, is understood as knowledge, skills, talents and abilities that further people’s economic, social and personal development. The purpose of the assessments is to provide a reliable source of information for planning and monitoring national education and training policies for human capital development, as well as for programming and policy dialogue in support of these policies by the European Union and other donors.

The ETF assessments rely on evidence from the countries collected through a standardised reporting template (national reporting framework – NRF) through a participatory process involving a wide variety of actors with a high degree of ownership by the country. The findings and recommendations of the ETF assessment have been shared and discussed with national authorities and beneficiaries.

The assessment report starts with a brief description of Azerbaijan’s strategic plans and national policy priorities (Chapter 1). It then presents an overview of issues related to the development and use of human capital in the country (Chapter 2), before moving on to an in-depth discussion of problems in this area, which in the view of the ETF require immediate attention (Chapter 3). Chapter 4 provides the overall conclusions of the analysis.

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EXECUTIVE SUMMARY

The European Training Foundation (ETF) Torino Process assessment provides an external, forward-looking analysis of the country’s human capital development issues and Vocational Education and Training (VET) policy responses in a lifelong learning perspective. It is based on evidence provided in the Azerbaijan national Torino Process report compiled in 2018 using a standardised questionnaire (National Reporting Framework) and additional information sources, where relevant.

The focus is on challenges that prevent the development and use of human capital in the country and can be addressed through education and training, including VET. For the purpose of this assessment, human capital is defined as the aggregate of the knowledge, skills, talents and abilities possessed and used by individuals for economic, social and personal benefit.

Azerbaijan’s priorities in human capital development feature across different strategic roadmaps adopted in December 2016, including the Strategic Roadmap for VET 2016–2025. The country is also implementing the European Union (EU) support programme: Annual Action Programme (AAP) 2014 on Education and Training. Preparations for the new EU AAP 2018 on Education for Employment are in the pipeline, including preparations for the next Eastern Partnership (EaP) multiannual programme.

This assessment is therefore meant as an input to the above-mentioned programmes. This report is a conclusion of the stakeholders’ workshop convened in Baku on 28–29 November 2019, to discuss an early draft of the ETF assessment. Participants found the ETF findings relevant and further elaborated the recommendations. The ideas they contributed are reflected in this final report.

Context

The EU's relationship with Azerbaijan is based on the EU–Azerbaijan Partnership and Cooperation Agreement, which has been in force since 1999. The EU’s cooperation with Azerbaijan aims at supporting the country’s reform agenda, in particular in the domains of economic diversification, sustainable growth and social development, good governance and rule of law, and its connection with the EU through enhanced connectivity, mobility and people-to-people contacts. One of the priorities for EU assistance to Azerbaijan is supporting skills development with a particular focus on VET, aiming to help the country to have a better match between the skills of the labour force and the needs of employers.

The country has rich natural resources, particularly oil and gas. However, the government acknowledges the importance of human capital development as a necessary prerequisite for reduction of the country’s dependence on oil and gas revenues, and strengthening its resilience to external shocks.

The primary goal of the government is to speed up economic diversification, maintain rapid growth in the non-oil sector regardless of the level of oil and gas revenues, increase competitiveness and expand expert opportunities.

This assessment finds multiple systemic challenges concerning the development and use of human capital in Azerbaijan, which may jeopardise further progress and the sustainability of reform achievements to date.
Findings on human capital

Three key issues have been identified in relation to the challenges relating to human capital development.

1. **Skills shortages due to low participation in VET**

   Skills mismatch is becoming a growing concern where businesses report an inadequately educated workforce as an obstacle to their business performance. On the Global Competitiveness Index, the country ranks 58th out of 141 countries, with particularly poor performance in ‘digital skills for active population’ and ‘ease of finding skilled employees’.

   The qualifications mismatch affects over 44% of employed young people (aged 15 to 29), according to a 2016 study by the State Statistical Committee (SSC), and 37% were employed in jobs not matching their qualifications. Yet good-quality retraining and upskilling opportunities, as well as internships to acquire practical experience, are relatively scarce.

   Participation in secondary VET is one of the lowest in the EaP region with 14.5% in 2018, compared to around 30% in Ukraine and 40% in Moldova and Belarus. The scope of VET provision is limited due to a lack of infrastructure and adequate training staff as well as a low interest in VET, as seen in the low enrolment numbers. There is a lack of functional and institutionalised platforms for cooperation. Furthermore, there are no financial instruments in place to give incentives to employers to strengthen their involvement in VET.

2. **Waste of human capital due to youth unemployment**

   According to the World Bank’s Human Capital Index released in 2019, Azerbaijan ranks 69th out of 157 countries.

   The country has a young population. In 2018, 20.7% of the total population were aged 0 to 14 years. The high proportion of young people in the population’s overall structure is reflected in an increase in the share of young people in the working-age population, and this trend will continue for some years. In the period 2017 to 2025, 125 200 people will be entering the labour market every year, which is almost 2.5 times higher than the number of jobs created annually.

   The positive characteristics of the labour market are a relatively high economic activity rate, a low unemployment rate, and a high level of employment mobility. The activity rate reached 70.5% in 2018, with differences between the rates for men and women (78.2% and 63.8%, respectively). The employment rate was 67.0% in 2018, higher for men (75.0%) than for women (60.1%). The overall unemployment rate is low, at 4.9% in 2018. It is higher for women (5.8%) than for men (4.1%) (ETF data collection, data received from the SSC, 2018).

   The negative features of the country’s labour market include relatively high youth unemployment of the total unemployed population (12.7%), vulnerable employment (55.2%), a high percentage of self-employed people (68.3%), especially in agriculture and construction, and higher growth in wages than in labour productivity (ETF, 2019a).

   Although the youth unemployment rate has been steadily decreasing over recent years, it is still higher than the overall unemployment rate and stood at 12.7% in 2018. Youth unemployment is higher among females than males (14.7% and 11.0%, respectively, in 2018), and young women are more
likely than men to be affected by vulnerable and marginal work. The percentage of those people not in education, employment or training is also high, reaching 23.0% in 2017.

A shortage of career guidance and professional orientation services leads to long periods of job search. The new Youth Employment Programme has the potential to address these issues.

3. **Limited human capital development opportunities for adults**

Public expenditure on education remained at 2.5% of gross domestic product in 2018. Overall, this figure is lower than the average of 4.5% in Eastern European countries and the average for higher middle-income countries. However, there is an almost 13% increase in the 2019 budget allocations for education, which confirms the government’s commitment to continue to improve the country’s human capital. In general, VET expenditure as a share of total education expenditure is very low and has decreased during the past five years, from 2.1% to 1.4%.

Participation of adults in education and training is limited, and there are a number of obstacles. Occupational standards are generally seen as the new starting point for developing state educational standards, but there is currently no system-wide use of them.

Azerbaijan has moderate levels of educational attainment among its adult population. In 2018 the majority of adults (aged 25–64) had a medium level of education (76.4%), 16.6% had completed higher education, and 7.1% had primary education or lower.

At present, there are limited opportunities for adult learning, skills and career development in Azerbaijan. Problems include the lack of adequate adult training facilities and offers, especially outside bigger urban centres.

**Recommendations for action**

The ETF assessment provides concrete recommendations concerning improvement of the strategic framework for the development of human capital with emphasis on the three identified key issues.

**Resolving the problem of skills shortages due to low participation in VET**

**Recommendation 1 – Improve the attractiveness of VET by prioritising it in all investments in human capital development**

The ETF recommends reviewing the VET financing system by diversifying its resources, developing a costing approach and improving the distribution of funds, their management and monitoring.

This will include establishment of the Vocational Education Development Fund, which will manage and allocate the funds among VET institutions in a transparent manner. The planning should take into account the various sources of funds, which are both public and private (including private VET providers’ and donors’ contributions), in order to bridge the current gap between strategies and actual achievements, ensure more visibility and transparency, and make the policy more credible.

**Recommendation 2 – Improve the relevance of VET for human capital development through further private sector engagement**

The ETF recommends a comprehensive and coherent approach to address this issue by fostering the conditions conducive to a multi-level and multi-stakeholder governance ecosystem that steers skills development to answer efficiently the real socio-economic needs and foster attractiveness for young people and enterprises.
The national authorities need to create incentives and dedicated policy mechanisms for the involvement of employers in the VET policy cycle. This should range from policy planning to implementation and monitoring, including development of VET standards and curricula in accordance with the real needs of the labour market as well as active participation in the governance of the VET system.

**Recommendation 3 – Raise the quality of skills provision by improving the conditions of professional staff working in VET**

The ETF recommends improving and streamlining the professional standards for VET teachers and masters\(^1\) and introducing career and professional development schemes for VET personnel. Azerbaijan could consider allowing practitioners from the world of work to enter teaching even without formal teaching qualifications. Furthermore, it is recommended to carry out activities to enhance the prestige of the teaching profession, including creation of a promotion and career development system. Sharing expertise and best practice among teaching personnel and companies needs to be stimulated more.

**Recommendation 4 – Reinforce evidence-based policy-making for more targeted skills policy development**

It is recommended to make regular use of analytical tools such as tracer studies with graduates and employer surveys that would provide data for more robust planning and show if the training is relevant to the labour market.

The shift to more targeted policy-making will require capacity building with regards to data collection and analysis.

**Prevent the waste of human capital due to youth unemployment**

**Recommendation 5 – Introduce services and training offers in support of labour market participation which are more youth-friendly**

The ETF recommends more coherence and adjusting the youth employment policies so that they include services and training offers that are more user-friendly and appealing to young people, thus making the focus on youth an integral part of the mainstream labour market policy of the country.

In particular, the ETF recommends improving youth support measures by tailoring them to the specific needs of different groups, in particular disadvantaged young people. Furthermore, it is recommended to invest in the professional development of staff from the state employment service, to prepare them for the complex task of target group outreach and diverse needs and expectations.

**Recommendation 6 – Strengthen the quality and relevance of early career guidance in secondary education and VET in particular**

The ETF recommends strengthening the quality and effectiveness of early career guidance and counselling services at general and VET institutions, including building career education into the curriculum, linking it to students’ overall development, and offering guidance in career planning throughout secondary schools. Employers and non-government organisations (in addition to the State Agency for Vocational Education and the Labour Market Observatory) should be involved in the development of trades and the promotion of VET and career guidance.

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\(^1\) The teaching and training in VET institutions are conducted by Teachers and Masters. There are three categories of masters - chief master, head master and master masters in VET system.
Expand the human capital development opportunities for adults

Recommendation 7 – Prioritise the expansion of adult education opportunities and the collection of evidence on participation in adult education

The ETF recommends prioritising the expansion of adult education opportunities, in a lifelong learning perspective, and the collection of evidence on participation in order to improve employability, close the mismatch gaps and ensure more equity. This improvement should cover the content and methods of training as well as their relevance to the labour market needs.

This could include reinforced involvement of public providers in adult education, and better coordination of the involvement of private providers. Developing interactive and participatory methods will be relevant in gaining interest, especially of young people, in learning and development of skills.
1. INTRODUCTION

1.1 About this assessment

The primary goal of the Azerbaijani government is to speed up economic diversification, maintain rapid growth in the non-oil sector regardless of the level of oil and gas revenues, increase competitiveness and expand expert opportunities. The Strategic Roadmap for Vocational Education and Training (VET) 2016–2025, adopted by the government of Azerbaijan in December 2016, sets out the short-, medium- and long-term vision for VET development. A comprehensive framework to improve the system sets the objectives to ensure radical improvements in a number of aspects of VET, such as to create a new positive image for VET; establish a management structure for VET providers based on an improved public–private partnership; create a rationalised and optimised network of public VET providers; increase the attractiveness of the VET system to the private sector; and create and establish 10 VET schools that will be equipped with high-end technology in their VET profiles.

One of the priorities for European Union (EU) assistance to Azerbaijan is supporting skills development with a particular focus on VET, aiming to help the country to have a better match between the skills of the labour force and the needs of employers. There are ongoing EU programmes that are important for human capital development in Azerbaijan.

The EU Annual Action Programme (AAP) 2014 contributes with a total budget of EUR 19 million to the sector. The objectives of the programme relate to enhancing the quality and relevance of the education system, with a focus on higher education and VET, increasing the attractiveness and labour market relevance of all levels of VET, and strengthening civic participation, governance and inclusiveness of the education system. Support to workforce planning and skills anticipation worth EUR 1.2 million will be financed under the AAP 2016, and the support will begin in early 2020. In the pipeline is EU support through the AAP 2018 Education for Employment programme with a total budget of EUR 14 million.

This European Training Foundation (ETF) assessment comes at an important point as the country prepares for the implementation of the AAP 2018 Education for Employment programme. Azerbaijan also participates in the Eastern Partnership (EaP) multiannual programme. Launched in 2009 as a joint policy initiative, the EaP aims to deepen and strengthen relations between the EU, its Member States and its six eastern neighbours: Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine. In May 2020, all six EaP countries and the EU will launch the third phase of the initiative and agree on the new ambitious work plan, revising the 20 Deliverables for 2020. It will aim to bring tangible benefits to the lives of citizens across the region. In this context, cooperation between the EU and its six EaP countries will focus on working towards stronger economies, stronger governance, stronger connectivity and stronger societies.

The assessment process included an extensive phase of desk research based on responses to a standardised questionnaire, the National Reporting Framework (hereinafter national Torino Process report), and the preparation of an issues paper with an overview of themes to be discussed in the present report, which were then finalised in consultation with the ETF country and thematic teams responsible for Azerbaijan. An advanced draft of the ETF assessment was circulated to national stakeholders and international partners and discussed at a consultation meeting to verify the findings and recommendations.
Like other ETF assessments, this paper is not meant to be exhaustive. The national report covers a broad selection of issues around human capital development and use, while the focus here is on challenges which the ETF recommends addressing as a matter of priority.

1.2 Country overview

Azerbaijan is a country located in the South Caucasus. The country has 63 districts, divided into municipalities, and 78 cities, as well as the autonomous republic of Nakhchivan, which has its own assembly, cabinet of ministers and judiciary. There are also nine economic regions (not administrative divisions), with the autonomous republic of Nakhchivan as the tenth. Since 1994, 20% of the total area of the country has been under occupation by Armenia.

The country has rich natural resources, particularly oil and gas. The large-scale energy-related reforms conducted after 2000 have created favourable opportunities for rapid development and have allowed Azerbaijan to become an upper middle-income country according to the World Bank classification. In particular, since the opening of the Baku–Tbilisi–Ceyhan pipeline in May 2005, the country has experienced a major surge in economic growth and poverty reduction, which was mainly attributed to rising energy exports (see Table 1.1). However, declining oil prices in 2014 coupled with a banking crisis caused a downturn, leading to high inflation rates, a weakened financial sector and a double currency devaluation in 2015. The economy stabilised in 2017 and presented a moderate gross domestic product (GDP) growth rate of 1.4% in 2018, while it reached 2.4% in the first half of 2019 (IMF, 2019). Currently, the hydrocarbon sector accounts for 41% of GDP, 92% of exports, and 65% of fiscal revenues (IMF, 2019).

<table>
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<th>TABLE 1.1: AZERBAIJAN DATA AT A GLANCE</th>
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<tr>
<td></td>
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<tr>
<td><strong>GDP growth rate (% year on year)</strong></td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>1.1</td>
</tr>
<tr>
<td><strong>Poverty (% of population)</strong></td>
</tr>
<tr>
<td>4.9</td>
</tr>
<tr>
<td><strong>Ease of Doing Business (ranking)</strong></td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td><strong>Human Development Index (ranking)</strong></td>
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</tbody>
</table>

Notes: GDP 2019 rates refer to the first half of the year; Ease of Doing Business ranking is calculated for 190 countries, while the Human Development Index is out of 189.


Recent country assessments emphasised the importance of economic inclusiveness and sharing the exhaustible hydrocarbon wealth with future generations (IMF, 2019; ADB, 2019). Related policy suggestions include: (i) the promotion of inclusive, diversified and private sector-led growth, driven by the non-oil industries; (ii) strengthening public sector efficiency by fostering public financial

2 Local government is exercised through local bodies of state administration and municipal governments. Municipalities can be distinguished as the only local self-government as the others are local executive bodies representing the central state at a local level (see OECD and UCLG, 2016).

management and the public corporate sector; and (iii) the prioritisation of infrastructure and human capital investments for a diversified and more competitive economy (ADB, 2019).

Azerbaijan has been proactive in reforming its business environment in order to address obstacles to growth. The government’s efforts were reflected in the 2019 edition of the World Bank’s Doing Business 2019 Report: Training and Reforms, which lists Azerbaijan as one of the top 10 reformers globally, improving to the 25th position from 57th in 2018 (World Bank, 2018c). However, the 2018 version of The Global Competitiveness Report 2017–2018 ranks Azerbaijan’s economy 69th, down from 37th (out of 137 economies), due to a decline in the overall macroeconomic environment (WEF, 2017).

Since 2010, Azerbaijan has been categorised as a high human development country by the United Nations Development Programme (UNDP). According to their Human Development Index, Azerbaijan rose from 98th place in 2007/08 to 87th place (out of 189 countries) in 2019. On the recently released World Bank’s Human Capital Index4, Azerbaijan ranks 69th out of 157 countries and is 58th out of 141 countries on the 2019 Global Competitiveness Index (Schwab and WEF, 2019), with poor performance in the skills pillar (48th), in particular ‘digital skills for active population’ (19th) and ‘ease of finding skilled employees’ (29th).

1.3 Strategic context

The development concept Azerbaijan 2020: A Look into the Future (2012) underlines the country’s aspiration to become a knowledge-based economy, increase the country’s competitiveness, and diversify the economic structure. Responding to the diversification challenge, the government has launched an ambitious reform agenda to increase the competitiveness of the non-oil sector. In 2016, the President adopted 12 strategic roadmaps for the national economy and main economic sectors, which set out objectives for the years from 2016 to 2025. The roadmaps target certain key sectors such as agriculture, industry, ICT (information and communications technology) and tourism, as well as cross-sectoral issues such as small and medium-sized enterprise (SME) development, logistics and trade networks, and modernisation of the education system. Corresponding action plans for 2016 to 2020 were also adopted. In addition, in October 2018, the President of Azerbaijan approved a new Employment Strategy for 2017–2030 that is fully aligned with the UN Global Initiative on Decent Jobs for Youth.

The government acknowledges the importance of human capital development as a necessary prerequisite for reduction of the country’s dependence on oil and gas revenues, and strengthening its resilience to external shocks. The government is committed to the process of the national education system reform and has declared education as one of the main priority areas for state policy. The critical and longer-term aim is to align the country’s education policies with its changing demographics, skills required to compete in the 21st century and allocating financial resources efficiently and effectively.

The Strategic Roadmap for Development of Telecommunication and Information Technologies acknowledges the importance of digital skills for the information economy. It envisages converting

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4 The Human Capital Index quantifies the contribution of health and education to the productivity of the next generation of workers. Countries can use it to assess how much income they are foregoing because of human capital gaps, and how much faster they can turn these losses into gains if they act now. For more details about the Human Capital Project, see https://www.worldbank.org/en/publication/human-capital.
schools to ‘e-schools’ (e.g. electronic books, electronic seminars, open-access educational materials, distance learning and website-based exams), creating ongoing ICT courses for teachers to stay abreast of the rapid evolution of digital technologies, and improving the evaluation of ICT skills of graduates and teachers.

The National Strategy for the Development of Education (2013) sets out a long-term vision of competence-based education, management mechanisms based on public–private partnerships, lifelong learning (LLL), modern educational infrastructure and sustainable financing mechanisms. An action plan for the implementation of the State Strategy for the Development of Education in Azerbaijan further determines the concrete actions in the education field. Central to the government’s reform agenda in 2018 was an enhancement to institutional frameworks, modernising the education system and strengthening social services.

A particular emphasis is placed on the education and VET-specific system that needs to meet the demand for an increasingly diversified and qualified workforce in the labour market. It is envisaged that the creation of new industries will generate demand in new skills and a skilled workforce that meet the requirements of the modern labour market. Thus, the VET sector is interlinked with the priorities set for other sectors, as it plays a significant role in the realisation of the full potential of those sectors. Azerbaijan’s integration into the world economy, the dynamic development of the economy, the widespread introduction of new techniques and technologies in every aspect of life and the emergence of new production methods are increasing the demand for labour from people with middle-level qualifications.

In relation to the above, Azerbaijan has joined the UN’s Sustainable Development Goals Strategy\(^5\). A national implementation and reporting mechanism has been formed in order to implement the 17 goals and 169 targets included in the Transforming Our World: The 2030 Agenda for Sustainable Development document\(^6\).

Finally, the EU’s relations with Azerbaijan are based on the EU–Azerbaijan Partnership and Cooperation Agreement which has been in force since 1999. In February 2017, the EU and Azerbaijan began negotiations on a new framework agreement designed to give new impetus to political dialogue and mutually beneficial cooperation. The negotiations have not been finalised yet.

The EU’s cooperation with Azerbaijan aims to support the country’s reform agenda, in particular in the domains of economic diversification, sustainable growth and social development, good governance and rule of law, and its connection with the EU through enhanced connectivity, mobility and people-to-people contact. In this context, supporting skills development is one of the priorities for EU assistance to Azerbaijan, with a particular focus on VET, helping the country to have a better match between the skills of the labour force and the needs of employers.


2. HUMAN CAPITAL: DEVELOPMENT AND CHALLENGES

Azerbaijan’s national development strategy aims to reduce the country’s dependence on oil and gas revenues, and strengthen its resilience to external shocks through investments in diversified human capital, physical infrastructure and stronger institutions. Diversification of the economy, with the development of the non-oil sector, has been set as a priority target. The State Programme for Development of Industry for 2015 to 2020 aims to establish industrial parks and neighbourhoods that meet the modern requirements of competitive production infrastructure, ensuring balanced development of the country’s economy. Introduction of innovative management and modern technologies, creation of new production sites and reducing unemployment are among the main priorities. In this context, human capital becomes a key factor in the promotion of prosperous, innovative and inclusive society.

This chapter provides a compact overview of the challenges with the development and use of human capital in Azerbaijan.

2.1 Human capital development indicators

The indicators in Table 2.1 provide a snapshot of Azerbaijan’s key human capital characteristics. The indicators point to a good level of human capital, while showing potential for fostering its continuous and lifelong development.

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<tr>
<th>TABLE 2.1: HUMAN CAPITAL DEVELOPMENT INDICATORS, AZERBAIJAN</th>
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<tbody>
<tr>
<td>(1) Population structure (%)</td>
</tr>
<tr>
<td>0–24</td>
</tr>
<tr>
<td>25–64</td>
</tr>
<tr>
<td>65+</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>2025</td>
</tr>
<tr>
<td>Year</td>
</tr>
<tr>
<td>Value</td>
</tr>
<tr>
<td>39.7</td>
</tr>
<tr>
<td>54.6</td>
</tr>
<tr>
<td>5.7</td>
</tr>
<tr>
<td>35.3</td>
</tr>
<tr>
<td>55.7</td>
</tr>
<tr>
<td>9.0</td>
</tr>
<tr>
<td>(2) Average years of schooling</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>10.7</td>
</tr>
<tr>
<td>(3) Expected years of schooling</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>12.7</td>
</tr>
<tr>
<td>(4) Learning-adjusted years of schooling</td>
</tr>
<tr>
<td>2017</td>
</tr>
<tr>
<td>8.7</td>
</tr>
<tr>
<td>(5) Adult literacy</td>
</tr>
<tr>
<td>2015</td>
</tr>
<tr>
<td>99.8</td>
</tr>
<tr>
<td>(6) Global Innovation Index rank (x/126)</td>
</tr>
<tr>
<td>2018</td>
</tr>
<tr>
<td>82.0</td>
</tr>
<tr>
<td>(7) Global Competitiveness Index rank (x/137)</td>
</tr>
<tr>
<td>2017–18</td>
</tr>
<tr>
<td>35.0</td>
</tr>
<tr>
<td>(8) Digital Readiness Index rank (x/118)</td>
</tr>
<tr>
<td>2019</td>
</tr>
<tr>
<td>12.77</td>
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Sources: (1) UN Population Division, World Population Prospects – 2017 revision; (2) UNESCO Institute for Statistics (UIS) database; (3) and (4) World Bank (2018), Human Capital Index; (5) UNESCO, UIS database; (6) World Economic Forum (WEF), The Global Innovation Index, 2018; (7) WEF, Global Competitiveness Index 4.0, 2018; (8) Cisco, Country Digital Readiness, 2018.
Indicator 1 shows that Azerbaijan has a young population. Indicators 2 to 4 focus on the years of schooling, which appear to be below the expected or planned number of years on average. Indicator 5 shows that adult literacy continues to be almost universal in Azerbaijan. Indicators 6 to 8 position the country in the global rankings of innovation, competitiveness and digital readiness. They are associated with human capital with regard to the current use of it.

2.2 Human capital in the context of demographic challenges

High share of young people in the working-age population

At the beginning of 2019, the population of Azerbaijan was 9,898,000. In the period from 2006 to 2018, the average annual population growth rate was about 1.3%, one of the highest in Europe.

### TABLE 2.2: POPULATION OF AZERBAIJAN, FROM 2010 TO 2018

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</thead>
<tbody>
<tr>
<td>Total</td>
<td>8,997,586</td>
<td>9,111,078</td>
<td>9,235,085</td>
<td>9,356,483</td>
<td>9,477,119</td>
<td>9,593,038</td>
<td>9,705,643</td>
<td>9,809,981</td>
<td>9,898,085</td>
</tr>
<tr>
<td>Male</td>
<td>4,455,503</td>
<td>4,517,055</td>
<td>4,583,484</td>
<td>4,648,793</td>
<td>4,713,548</td>
<td>4,775,857</td>
<td>4,835,641</td>
<td>4,891,210</td>
<td>4,938,027</td>
</tr>
<tr>
<td>Female</td>
<td>4,542,083</td>
<td>4,594,023</td>
<td>4,651,601</td>
<td>4,707,690</td>
<td>4,763,571</td>
<td>4,817,181</td>
<td>4,870,002</td>
<td>4,918,771</td>
<td>4,960,058</td>
</tr>
</tbody>
</table>

Source: The State Statistical Committee of the Republic of Azerbaijan (data received)

At present, Azerbaijan is one of the few countries in Europe to have a young age structure. The proportion of the population aged 0 to 14 decreased from 28.7% in 2010 to 20.7% in 2018, and the 15 to 64 age group increased from 65.8% to 70.9% in the same time. Young people aged 14 to 29 years constitute 25.5% of the country’s population. Compared to 2003, the proportion of people aged 65 years and over in 2018 has risen from 6.0% to 6.6%.

### FIGURE 2.1: RELATIVE SIZE OF YOUTH POPULATION (%)

In 2018, 20.7% of the total population were aged 0 to 14 years. The high proportion of young people is reflected in an increase in their share in the working-age population, and this trend will continue for some years. The relative size of the youth population provides a measure of the size of the potential group of new entrants to the labour market relative to the whole working-age population. It is also a
manifestation of the scale of the challenge facing the country when it comes to the education and training system to provide young people with appropriate skills. In the period from 2017 to 2025, it is anticipated that 125,200 people will enter the labour market every year, which is almost 2.5 times higher than the number of jobs created in one year (Salmanova, 2017).

**Rural–urban migration and skills challenges in the competitive labour market**

About 52.9% of the population live in urban areas and 47.1% in rural areas. Between 2000 and 2017, the urban population increased by 26.58%, while the rural population increased by 17.46%, showing the acceleration of urbanisation. However, the process is not uniform. Absheron and Baku are predominantly urban, while most other economic regions are mainly rural. A significant number of rural migrants have settled in big cities, such as Baku, Sumgayit and Ganja. Today, almost half of the urban population resides in Baku, causing negative consequences, such as overpopulation, environmental degradation, congestion, traffic jams, unemployment, pollution, and difficulties with water supply and sewage systems. According to Baku City Statistics, approximately 2,249,500 people live in Baku, with the highest level of population density in the country: 1,051 people per square kilometre (Alakbarov, 2017).

As in other developing countries, rural–urban migration in Azerbaijan has led to overcrowding of metropolitan Baku and its suburban areas (villages and towns in Absheron in close proximity to the capital). A depressed economy and lower standards of living force villagers to Baku (the centre of the oil industry) or Absheron (with a comparatively lower cost of living but geographic proximity to Baku). Overcrowding affects the livelihood of a considerable number of communities and residents. In recent years, only Baku and Absheron have experienced positive net migration, while other (primarily rural) regions have a negative migration track record. The highest migration outflow is registered in Lankaran and Aran, where the share of rural residents is 75% and 60%, respectively. These two regions also have higher birth rates compared to the national average, which creates additional surplus in the workforce (Sadigov, 2013).

Once settled in Baku, rural migrants face a highly competitive labour market, in which they do not have much to offer (due to their low levels of education and lack of skills). With growing competition for lower-skilled jobs in the capital’s labour market, rural migrants usually get part-time, seasonal, short-term jobs in low-skilled occupations, such as retail sellers, loaders, taxi drivers, waiters and dishwashers (Sadigov, 2013).

The marketisation of the country’s economy in the 1990s and the changing demographics of the city – driven largely by the further influx of thousands of rural migrants and refugees – turned the city’s social geography upside down and reconfigured the character of the city’s districts, both central and outlying. The 11 administrative districts of Baku cover only roughly 4% of the territory of the country. However, that territory now hosts 30.6% of the economically active population and generates 76.8% of the country’s GDP (75.6% of which is concentrated in ‘proper Baku’). By 2017, 85–90% of national income was generated in the Greater Baku area (SSC, 2018; Vallyev and Wallwork, 2019).

**VET institutions and internally displaced persons**

At the end of the 1980s, more than 250,000 ethnic Azerbaijanis were deported from Armenia on the eve of the collapse of the former Soviet Union. Azerbaijan faced migration problems due to the political and economic crisis in the early 1990s. The occupation of 20% of the territory by Armenia and the resulting one million refugees and internally displaced persons (IDPs) has had a big impact on the
economy. Nowadays, Azerbaijan continues to host a large number of IDPs due to the 30-year dispute with Armenia over Nagorno-Karabakh. Official statistics provided by the State Committee for Refugees and IDPs put the number of IDPs at 789 000, while the United Nations High Commissioner for Refugees (UNHCR) refers to around 613 000 IDPs as of 2016. A further 68 000 persons have been internally displaced since 2009 due to natural disasters. Refugee inflows from other countries have increased but remain low compared to other countries in the region.

Vocational education has been affected, mainly as some refugees and IDPs were settled in the dormitories and facilities of VET schools. About 7 000 people, live in 31 VET institutions all around Azerbaijan (Kazimov and ETF, National Torino Process report).

Migration of human capital

After the fall of the Soviet Union, during the transition to new social and economic systems, there was mass emigration of citizens of Azerbaijan which led to tension in the labour market. As a result of more recent socio-economic developments and an increase in living standards in the last decade, mass emigration has slowed down, but so-called brain drain (i.e. the migration of highly trained or qualified people to other countries) may affect the labour market and bring further challenges in the coming years. In general, Europe is increasingly becoming attractive destinations for migrants from Azerbaijan – at least 42 000 Azerbaijanis currently live in the EU, although the Russian Federation remains both the main country of destination and origin (of immigrants and returning migrants). Based on data compiled for this report, total net emigration from Azerbaijan is still negative.

In 2018, more than 44 000 foreigners moved into the territory of Azerbaijan. More than 26 000 of them were men and 18 000 were women. The vast majority of foreigners who live in the country are individuals between the ages of 19 and 35 (43%) and 36 and 60 (37%) (Kazimov and ETF). A growing number of short-term migrants come to Azerbaijan: 48 500 temporary residence permits were issued in 2016 and 54 000 in 2015, mostly for citizens of Turkey, the Russian Federation and Georgia. Permanent residence permits may only be issued after at least two years of residence. More than 3 200 of these permits were issued in 2016 (ICMPD, 2018).

In 2018, the Human Development Index for Azerbaijan was 0.75, an increase from 0.63 in 1999, growing at an average annual rate of 0.92%.
2.3 Human capital in the context of the changing world of work

Unemployment rate is one of the lowest in the EaP

Azerbaijan’s labour market has a few positive characteristics, but it also faces several challenges. The positive characteristics are a relatively high economic activity rate, a low unemployment rate, and high flexibility. The activity rate reached 70.5% in 2018 (up from 68.4% in 2013), with differences between men and women (78.2% and 63.8%, respectively), and is one of the highest in the EaP. The employment rate was 67.0% in 2018, much higher for men (75.0%) than for women (60.1%). The overall unemployment rate was low, at 4.9% in 2018, with a minor decrease from 5.0% in 2017. It is higher for women (5.8%) than men (4.1%)

**FIGURE 2.2: ACTIVITY RATE (2018) (%)**

According to preliminary data for January 1, 2019, there were 5,133,100 economically active people, of which 4,879,300 were employed. The labour force participation rate also varies across urban and rural areas. The unemployment and inactivity rate are usually higher in urban areas. In rural areas, due to subsistence agriculture, labour force participation is high.

The service sector is the largest source of employment and provides jobs for almost half of the workforce (49.1% in 2018). The agriculture sector accounts for the smallest share of GDP, but provides employment to 36.3% of the workforce, suggesting subsistence-type farming. It also generates about two-fifths of household income in rural areas. The industrial sector accounts for the lowest share of employment (14.6% in 2018), but the highest share of contribution to GDP.

As a result of recent market-oriented reforms and structural changes in the economy, the share of people employed in the private sector has been increasing. An important characteristic of the employment structure is a high level of self-employment, which has risen noticeably since 2000, reaching 68.3% in 2018. Self-employment has increased across all sectors, particularly in agriculture and construction. In addition, the proportion of informality is high, mainly in agriculture but also in other sectors such as transport, manufacturing, trade and construction. Incidence of vulnerable employment is also high, at 55.2% in 2018, and is one of the highest in the EaP countries.
Youth unemployment much higher than overall unemployment

A closer look at youth performance in the labour market in Azerbaijan indicates important findings. Although over the past decade the government has managed to put in place policies to support active engagement of young people in the labour market and notable improvements have been seen in relation to youth unemployment, the youth unemployment rate still remains much higher than overall unemployment. As an example, the youth unemployment rate declined from 13.7% in 2013 to 12.7% in 2018. However, 12.7% youth unemployment is almost 2.6 times more than the total unemployment rate of 4.9% in 2018. Youth unemployment is higher among females than males (14.7% and 11%, respectively in 2018) and young women are more likely to be affected by vulnerable and marginal work than men. The high unemployment rate among young people compared to general unemployment can be explained by limited job opportunities, lack of work experience, and relatively high reservation wages (i.e. the lowest wage a worker is willing to accept). Percentage of young people not in education, employment or training (NEETs) is also high and reached 23% in 2017.

**FIGURE 2.3: ACTIVITY RATE OF YOUTH 15 TO 24-YEAR-OLD (%)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>47.1</td>
<td>48.3</td>
<td>46.3</td>
</tr>
<tr>
<td>2016</td>
<td>45.7</td>
<td>46.3</td>
<td>45.7</td>
</tr>
<tr>
<td>2015</td>
<td>43.3</td>
<td>44.3</td>
<td>42.4</td>
</tr>
<tr>
<td>2014</td>
<td>38.9</td>
<td>39.5</td>
<td>38.4</td>
</tr>
<tr>
<td>2013</td>
<td>36.9</td>
<td>37.4</td>
<td>36.4</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

Around 91% of economically active young people have a medium or high level of education, yet many work in jobs requiring different levels and profiles of qualifications. More than a quarter of young people work in manufacturing, around 20% in ICT, followed by agriculture and transportation. The transition to work for young people remains a challenge. While there is no available data on the average transition time, graduates struggle to find jobs. According to a 2016 survey, more than one-third of young people in employment found their job by word of mouth and 30% through advertised vacancies; only 8.4% of young people in employment found their job through the state employment service (SES). The youth unemployment rate, which is calculated by dividing the number of unemployed persons aged 15 to 24 by the total population of the same age group, was 5.6% in 2018 and has been rising since 2010. This is also a measure of the overall probability of young people being unemployed and the associated underutilisation of their skills.
Skills mismatch affects young people and adults

Qualification and skills mismatch affect many young people, yet good-quality retraining and upskilling opportunities, as well as internships to acquire practical experience, are relatively scarce. The qualifications mismatch affects over 44% of employed young people (15–29), according to a 2016 study by the State Statistical Committee (SSC): 37% were employed in jobs not matching their qualifications, while 7% were partially matched to the profile of their jobs. The survey identified the causes: 30% are self-employed and run small businesses; 19% mention limited employer demand for their qualifications; over 25% mention unattractive working conditions and low salaries. Another study (World Bank STEP Survey, 2013) analysed the perception of employers on skills mismatch and concluded that employers cannot find workers with the right skills for the job, citing problems with the education system. Employers criticised weaknesses in young peoples’ technical job-specific skills, but also in cognitive skills and socio-behavioural skills including literacy, problem-solving, communication and teamwork.

According to data 2016 published in the Strategic Roadmap for the Production of Consumer Goods at the Level of SMEs, the contribution of small enterprises and individual entrepreneurs to GDP is limited. Of all registered legal entities, 12% are SMEs, their contribution to GDP is 4%, contribution to employment is 6.3% and contribution to production of goods and services is 9.6%.

Employers claim that it is difficult to find workers with required skills. The shortage is particularly pronounced in the case of modern, innovative firms, which tend to require more advanced skills. Employers seek not only technical, job-specific skills but also cognitive skills (such as literacy, numeracy and problem-solving) and adequate socio-behavioural, soft skills (such as communication, teamwork, leadership and the ability to work independently) (Bayramli et al., 2019). The development of these skills among students represents the main challenge for the education system in Azerbaijan and is critical to address the skills gap. There is no labour market information system to help labour market actors (education and training institutions, students, jobseekers, employers and public employment services) to make informed choices. Furthermore, making the education system more responsive to the labour market requires strengthening the systematic partnership between education institutions and employers.

The skills mismatch is becoming a growing concern; businesses report an inadequately educated workforce as an obstacle to their business performance. Azerbaijan’s 2019 Business Climate Survey8, for the fourth consecutive year, reported that the shortage of skilled workers is an increasingly significant bottleneck for EU businesses active in Azerbaijan. The number of respondents grading the availability of skilled workers as satisfactory declined from 31% in 2018 to 21% in 2019. Many EU companies remain critical of the quality of academic education and vocational training; 45% deem vocational training to be unsatisfactory. The most frequently cited concerns are about the lack of practical and modern methods and the low level of digitalisation in the education system (Bayramli et al., 2019).

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8 The Annual Business Climate Survey reflects the views of EU companies operating in Azerbaijan. It is carried out by the German-Azerbaijani Chamber of Commerce (AHK Azerbaijan), with financial and technical support from the EU delegation to Azerbaijan. In 2019, 130 completed responses were selected to represent a valid and statistically significant sample. Respondents represented 16 sectors. Twenty in-person interviews were organised with EU businesses representing 10 sectors.
2.4 Human capital and education and training

Improved educational attainment levels

Over recent years, Azerbaijan has been showing steady progress on a number of education indicators. The country has high literacy rates: in 2016, these were 99.79% for adults and 99.94% for young people, with almost universal coverage of primary education (in 2016, the net enrolment rate was 94.93%) and high levels of secondary school enrolment, with a primary to secondary transition rate of 99.42%.

**TABLE 2.3: EDUCATIONAL ATTAINMENT OF ACTIVE POPULATION AGED 15+ (%)**

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>7.4</td>
<td>7.0</td>
<td>7.4</td>
<td>7.5</td>
<td>7.5</td>
<td>7.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Medium</td>
<td>76.3</td>
<td>76.7</td>
<td>76.4</td>
<td>76.2</td>
<td>76.2</td>
<td>75.9</td>
<td>76.4</td>
</tr>
<tr>
<td>High</td>
<td>16.3</td>
<td>16.2</td>
<td>16.3</td>
<td>16.3</td>
<td>16.3</td>
<td>16.4</td>
<td>16.6</td>
</tr>
<tr>
<td>VET</td>
<td>15.8</td>
<td>15.8</td>
<td>16.0</td>
<td>16.2</td>
<td>16.2</td>
<td>16.3</td>
<td>16.6</td>
</tr>
</tbody>
</table>

Source: The State Statistical Committee of the Republic of Azerbaijan (data received)

The total number of students in the country has been increasing and reached 1.97 million in the 2018/19 academic year. Most of them (1.52 million) were in the general education system. There were 171 154 vocational education students and 51 806 specialised secondary education students. In the same academic year, the number of students in higher education was 184 211, an increase of 38 000 since 2010. The country has a relatively low share of students in upper secondary vocational education at International Standard Classification of Education (ISCED) Level 3. It decreased from 15.8% in 2013 to 14.2% in 2017, but slightly increased to 14.5% in 2018. The gross enrolment rate in tertiary education is also relatively low (27.2% in 2017), especially when compared with the average of 33.4% for higher middle-income countries. However, it has been steadily increasing.

Very low participation in VET programmes

**TABLE 2.4: NUMBER OF STUDENTS ENROLLED IN VOCATIONAL PROGRAMMES AT ISCED LEVEL 3 (IN THOUSANDS)**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>21.9</td>
<td>23.9</td>
<td>24.8</td>
<td>24.3</td>
<td>20.9</td>
<td>19.4</td>
<td>19.7</td>
<td>19.8</td>
<td>19.2</td>
</tr>
<tr>
<td>Male</td>
<td>15.6</td>
<td>17.0</td>
<td>17.7</td>
<td>17.6</td>
<td>15.2</td>
<td>14.1</td>
<td>14.3</td>
<td>15.1</td>
<td>14.6</td>
</tr>
<tr>
<td>Female</td>
<td>6.3</td>
<td>6.9</td>
<td>7.1</td>
<td>6.7</td>
<td>5.7</td>
<td>5.3</td>
<td>5.4</td>
<td>4.7</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Source: The State Statistical Committee of the Republic of Azerbaijan (data received)

Since the early 1990s, there has been a negative trend of workers entering the labour market without any specialisation. It is estimated that only 32% of the 4.6 million workers in Azerbaijan have a formal qualification. According to official statistics, each year more than 60% of general education graduates enter the labour market without any specialisation (ETF, 2017). Over the past five years, only around 14% of students of secondary education level were enrolled in VET, with a particularly low share of

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10 http://uis.unesco.org/country/AZ
girls (around 8%), although the total share slightly increased to 14.5% in 2018. As a result of these trends, the young generations of the labour force have basically either secondary general education or higher education. Workforce structure by educational attainment shows that, in 2018, 76.4% of the active population had a medium level of education, 16.6% completed higher education, and 6.6% had primary education or lower. Analysis of the trends over a five-year period points to a slight increase in the share of the workforce with a high level of education against a slight drop in share of those with a medium level of education, while the share of the active population with a low level of education stayed constant. In Azerbaijan, 76.4% of the labour force has completed secondary education, which is the highest in the EaP region.

FIGURE 2.4: LABOUR FORCE (AGED 15+) BY EDUCATION (2018) (%)

Human capital from early childhood to higher education and onwards

Development in early childhood is a multi-dimensional process and has significant implications on individual human capital. The Systems Approach for Better Education Results (SABER) (2018a) findings indicate that in the education sector in Azerbaijan, significant disparities exist at the sub-national level, with students in rural areas three times less likely to attend preschool than urban students. Only about 20% of 3- to 6-year-olds are enrolled in preschool education facilities, which makes Azerbaijan one of the countries in the Europe and Central Asia region with the lowest access to preschool education (World Bank, 2018a). Early school dropouts (after basic education – grade 9) are a serious issue in the regions of Azerbaijan, especially in the villages. Girls are influenced by their families to leave school and get married, which is the main reason for female dropouts. To address these negative trends, the government is actively introducing measures to improve these indicators. In preschool education, the focus has been on establishing state-financed school preparation groups. According to the Ministry of Education (MoE), the level of involvement of 5-year-olds in education has increased from 24% in 2013 to 75% in 2018.

The higher education sector in Azerbaijan is composed of 51 institutions (as of 2017). Twenty higher education institutions (HEIs) are public, reporting to the MoE; 13 HEIs are private, overseen by the MoE; and 18 HEIs are public but overseen by various other ministries. Among these, the majority are specialised universities (six with military training focus, for example), and 15 are general HEIs providing a wide range of educational programmes. Azerbaijani universities are heavily concentrated...
in the capital city of Baku, home to 82% of all HEIs in the country. In 2016, about 164,000 students studied at Azerbaijani HEIs, 88% of them enrolled in public universities. The Azerbaijani higher education system continues to be characterised by low levels of tertiary education enrolment, compared both internationally and against its closest neighbours. In 2016, Azerbaijan’s gross enrolment rate in tertiary education was 27.2% (4% in vocational education and 23% in higher education), well below its neighbours Georgia (51.8%) and Armenia (51.2%). Access to higher education is unbalanced in relation to household income, ranging from 40% among the richest households, those in urban areas, and in Baku city, to only 11% for the poorest households and those from rural areas (World Bank, 2018b).

Results of PISA 2018 and PIRLS 2016

The success of learners in later stages of education and through life is deeply affected by their performance in general basic education. The Organisation for Economic Co-operation and Development’s (OECD) Programme for International Student Assessment (PISA), held every three years since 2000, tests the proficiency level of 15-year-old schoolchildren in reading, mathematics and science. Azerbaijan participated in PISA 2018 research, which took place in April–May of 2018, with 6,872 schoolchildren from Baku included in the international research.

The PISA survey showed that Baku (Azerbaijan) students ranked below the OECD average in all main subjects. Only 2% of students scored Level 5 or higher in mathematics (OECD average: 11%). Six Asian countries and economies had the largest shares of students who did score Level 5 or higher: Beijing, Shanghai, Jiangsu and Zhejiang (China) (44%), Singapore (37%), Hong Kong (China) (29%), Macao (China) (28%), Chinese Taipei (23%) and Korea (21%). These students can model complex situations mathematically, and can select, compare and evaluate appropriate problem-solving strategies for dealing with them (OECD, 2019b; Avvisati et al., 2019). In the post-Soviet region, Azerbaijan only does better than Georgia and Kazakhstan, but only marginally. Test results were equally unimpressive in the field of science, with its score of 398 far below the OECD average of 489. The survey only covered Baku; results would have likely been even poorer had they also covered the regions where school quality is considerably worse. In a country-specific snapshot published separately, the PISA results also highlighted a lack of creative thinking skills and weak school discipline (Gulylev, 2020).

On a larger scale, in April–May of 2016, the main stage of the Progress in International Reading Literacy Study (PIRLS) was conducted at general education institutions at national level, where 170 general education institutions were identified by random selections. Based on PIRLS results, the share of pupils in reading comprehension who performed under the ‘low’ level was 27% (MoE annual report 2017, 2018).

Funding of education, research and VET

In 2018, Azerbaijan’s public expenditure on education remained at 2.5% of GDP. Overall, this figure is much lower than the average of 4.5% in other Eastern European countries and the averages of higher middle-income countries. However, there is a notable increase in the 2019 budget allocations for education (up by almost 13%) which confirms the government’s commitment to continue to improve the country’s human capital. In general, VET expenditure in total education expenditure is very low and has decreased over the last five years, from 2.1% to 1.4%. In 2019, approximately AZN 39.6 million was allocated to initial VET, which is AZN 11.7 million more than in 2018.
Although expenditure on research and development (R&D) has been increasing in absolute terms since 2000, total spending remains low as a share of GDP. The AZN 118 million allocated to science in the 2018 national budget accounts for less than 0.2% of GDP. Such levels of investment are not sufficient for a country to make a meaningful impact in advancing its innovation capabilities. Innovative economies of similar size, such as Austria and Sweden, spend about 3% of GDP on R&D, while the OECD average is 2.5%. Azerbaijan’s level of R&D investment lags behind Georgia, Armenia, Belarus, Ukraine and the Russian Federation, while its low level is comparable to that of Kazakhstan and Uzbekistan (World Bank, 2018b).

Public funding of R&D in higher education is relatively low in Azerbaijan. Of the AZN 2 001.5 million (3% of GDP) in public funding allocated to education in 2018, approximately AZN 200 million went to higher education (10% of the total education budget, less than 0.3% of GDP). Of this amount, AZN 160 million was allocated to HEIs in the form of per capita student payments, while AZN 42.7 million covered the costs of several budget-funded universities (and mainly financed infrastructure costs). This leaves the majority of universities heavily dependent on tuition fees, limiting their capacity for self-funding substantial research activities. Relatively little research produced in Azerbaijan has a notable impact on global knowledge creation and diffusion. According to the H-index, Azerbaijan ranks 113th in the world based on the quality (impact) of its research. This lags behind its regional peers of similar or much smaller size, such as Belarus (73rd), Georgia (77th) and Moldova (101st) (World Bank, 2018b).

Summary

In the last few decades, Azerbaijan has been experiencing significant demographic changes: a change in the structure of the population and demand for new jobs, massive urbanisation of major cities, particularly in Baku, and migration phenomena in its various forms. A gradual shift to a new economic growth model that can meet significant challenges of job creation and the reduction of social and regional inequalities will require upgrading and making adjustments to human capital in the country. Adults are profoundly affected by these phenomena, and the impact on human capital and skills mismatch is vast.

Many young people experience extended periods of unemployment. This is an obstacle for their skills development, future employability and earning capacity. A long period of unemployment runs the risk of youth labour market detachment, especially among young women and men seeking their first job. The transformation of the world of work is an ongoing process and it poses a significant challenge for businesses to cope with the skills they need. The existing network of VET providers in general is not able to cover sound quality levels in cost-intensive professional areas of VET, due to the scarcity or outdated nature of existing equipment. VET is faced with deficient levels of participation, with one of the lowest in the EaP.

To achieve the ambitious objective as presented in the Strategic Roadmaps, the government of Azerbaijan is establishing human capital development as one of the key priorities, and developing new skills and capabilities of citizens features high on the reform agenda. The key focus is to proceed with the policy with sustained focus addressing key challenges such as waste of human capital due to youth unemployment, shortages of skills due to low participation in VET programmes and limited human capital development opportunities for adults. Bridging the divide, preparing citizens for the world of tomorrow and making sure that people can be upskilled throughout their life requires rethinking how to deal with human capital and modernisation of education and training systems.
3. ASSESSMENT OF KEY ISSUES AND POLICY RESPONSES

This chapter focuses on three key issues: i. resolving the skills shortage problem due to low participation in VET; ii. preventing the waste of human capital due to youth unemployment; and iii. expanding the human capital development opportunities for adults. Each of them features a description of the human capital development issues and description and assessment of relevant policies and practice. Concrete recommendations are provided that match the findings and suggest how to specifically address each key issue identified in Azerbaijan.

The analysis of the human capital issues, relevant policy responses and policy gaps, as well as identification of the recommendations, was discussed and adjusted at a meeting in November 2019 in Baku, with an enlarged group of national stakeholders representing public authorities at central and local level as well as private sector and international organisations. The ETF believes that the skills development system in Azerbaijan should better support the national priority of economic diversification by addressing the shortage and waste of skills and further develop adult education in a LLL perspective. There is unanimity for the need to declare human capital development as a national priority.

3.1 Resolving the problem of skills shortages due to low participation in VET

3.1.1 Measuring what matters

The reasons for low participation in VET vary from context to context, from country to country. The issue is related to the attractiveness and image of VET, but also how different groups of citizens perceive it. It is also about relative esteem with general upper secondary education. Viewpoints and perceptions are likely to influence attractiveness; these viewpoints extend beyond young people. The results of different research available in the EU Member States show that parents and families, teachers, people from the world of work, and the internet/social media may all be essential influencers on potential student decision-making and so their perceptions are important. Participation in VET is also influenced very much by the supply and demand factor relevant to the labour market.

To understand the phenomenon of low participation in VET, we need to analyse several parameters. The legacy of the system is important. Azerbaijan inherited its VET system from the Soviet Union, a system designed to meet the needs of a centrally planned economy. During a period of transition to a free market, the VET system underwent a critical period, which was caused by declining resources and the absence of clear VET policy priorities. The number of VET institutions dramatically fell, the relations with enterprises broke down as a result of the collapse of many state enterprises, and the number of VET graduates decreased from almost 55 000 in 1990 to 11 000 in 2005. The number of graduates has fluctuated around the 15 000 mark in the past 10 years.

Overall, participation in secondary VET is very much below the EU average and is one of the lowest levels in the EaP region: about 40% in Moldova and Belarus, around 30% in Ukraine and Armenia, while in Azerbaijan this was 14.5% in 2018; only Georgia has a lower level in the region, at 8.8%. Without going into an in-depth reflection, a simple look at a few issues confirms that the VET sector has been forgotten and neglected over the past few decades. One undeniable and significant challenge is related to access to VET, which certainly has an impact on low levels of participation. The
scope of VET provision is somewhat limited due to a lack of infrastructure and adequate teaching personnel. There was an increase in the planned number of students in primary VET institutions between academic years 2015/16 and 2017/18; however, in academic year 2018/19, the admissions target was reduced. Also, the share of state-financed students has been decreasing.

There is low interest in VET, shown by low enrolment numbers. In the 2018/19 academic year, 329 state-financed places were not filled because of the unattractiveness of particular programmes or because the introduction of new occupations was poorly communicated. The positive trend is that more than half of the places for tuition-based programmes were filled. Another positive trend is an improvement in the qualitative indicators, as 20% of those admitted to vocational education institutions had an average score above four for their high school diploma. In general, the number of applicants with high school diploma scores of 4 and 5 has more than tripled in the last two years (MoE, 2017). However, it is still challenging to attract talented young people to vocational education. Most students attending VET institutions are from low-income families, those with low grades and from rural and remote areas. As the admission rules do not require assessment of prior knowledge, classes are organised for students with different skills levels and this negatively affects the learning process.

Low participation in VET is very much influenced by failing infrastructure. The existing network of VET as the equipment is scarce or completely outdated (welding, car mechanics, electronics etc.) (ETF, 2014). One of the strategic goals of the VET Roadmap is optimisation of the network of VET institutions and the improvement of their material and technical base. The optimisation process started in 2017 with a merger of educational institutions located in Baku and Ganja. To date, the number of public VET institutions has been reduced from 114 in 2016 to 76 in 2019. Twenty-four new vocational education centres were established based on 55 vocational schools and lyceums. Currently, they offer training in 168 vocational programmes, 33 of which are new. As many newly established centres are located in the old vocational school facilities, refurbishment of the facilities has started. Most of the vocational institutions in the regions do not have dormitories, and some are still used by refugees, IDPs and residents. The absence of functioning dormitories means that schools can only attract local students and staff, and this hampers access for certain groups of students.

The situation is not likely to change if the authorities retain the present level of spending on VET, which at the time of this assessment was around 0.05% of GDP and accounted for only 1.5% of total education expenditure. Moreover, the VET budget is allocated to the MoE as part of the education budget, through a process which does not accommodate proposals and information about funding needs by the State Agency for Vocational Education (SAVE) and VET providers. The financial allocation mechanism based on values and factors defined in the past, such as school size, enrolment and the operational costs of schools, ignores the capital expenditure needs, i.e. for the maintenance of infrastructure and the need for investment in the professional development of staff.

The way stakeholders are engaged in VET management and delivery has a significant impact on participation in VET. In Azerbaijan, the VET system, as with other forms of education, is highly centralised with a dominant role played by the government and a top-down approach to implementing any changes. VET is governed by the MoE and SAVE, which was established in 2016, but the focus is mainly on the VET that is the responsibility of the MoE. The management and regulation of this sub-segment of education and training, in reality, is split between different line ministries, which impedes the coherence of policies and leads to overlaps and duplications in responsibility. For instance, although the MoE is responsible for the development of educational standards, curricula, assessment standards, accreditation standards, and the quality assurance of qualifications, it is the Ministry of
Labour and Social Protection of Population (MLSPP) that coordinates monitoring and analysis of labour market trends, as well as the development and application of occupational and qualification standards. Different line ministries, which are in charge of their education institutions, can submit proposals on education and qualification standards and are involved in quality assurance of the related qualifications. Also, the MLSPP supervises training provision for jobseekers and unemployed people through supplementary short vocational training courses.

The quality of VET provision is an important parameter that influences participation in VET. And here, apart from the importance of curriculum, teachers and school staff, training policies matter significantly. The new teacher training policy in Azerbaijan faces some issues in the following areas: the selection processes for teachers; recruitment; teacher retention; teachers’ status; teachers’ qualifications; rankings; the salary system. There are some limitations and shortcomings in implementing diagnostic tests on teacher development; such criteria could help find opportunities to understand the importance of teaching. All these factors aim to develop adequate teacher preparation, and Azerbaijani society has an increasing interest in and increasingly positive attitudes towards teacher training policy. The majority of parents and community members are eager to see teachers in schools who are trained, qualified, and have good practical experience. Adequate teacher preparation has a significant impact on solving the problems in various areas, and, in doing so, can lead to professional teaching and learning. However, without governmental and systemic change, teachers lack the authority and competence to bring about the necessary changes (Hüseynova, 2019).

A comprehensive teacher development policy in VET has not been developed yet and that has an overall negative impact on the quality of the VET system. Limited exposure to the world of work, outdated competences of teachers, and a lack of professional development and training are the main factors affecting the quality of teaching. Although minimum quality indicators of teachers and masters are indicated in the VET Law and state standards of VET, the quality of VET staff is low. Over the last decade, the workforce of teachers and instructors has been slowly declining and ageing, and there is a significant gender gap, with 70% of teachers being female. Due to the limited exposure to the world of work, many teachers lack practical knowledge and skills. The problems are particularly severe in the occupations where highly skilled people are demanded, including industry, construction, ICT and processing. An additional aspect of the challenge with teachers is the substandard conditions of their employment, which hinders VET from attracting well-qualified entrants to the profession and retaining young teachers.

The VET Roadmap acknowledges that partnership with employers is one of the critical prerequisites for taking the vocational education system of Azerbaijan to an advanced level and envisions that by 2025 employers will be fully integrated into the VET system, from the development of educational curricula to financing. However, the involvement of the business sector in the VET provision is still somewhat limited. There is a lack of functional and institutionalised platforms for exchange and cooperation, as well as no financial instruments to give incentives to employers to strengthen their involvement in VET. VET provision is still mostly school-based. Although the study programmes include industrial experience which needs to take place in facilities where the learners can practise, most of the classes are held in schools or in companies where learners get minimal practical experience. With large numbers of SMEs all over the country, these are still the most likely workplaces for VET school graduates. Most of these SMEs do not have the required capacity and resources to provide good-quality practical training. However, the recent Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ, a German development agency) study concluded that there is great potential for promoting work-based learning (WBL) in Azerbaijan, especially in highly employment-relevant
**1. Improve the attractiveness of vocational training**

- Prioritise vocational training in all human capital development investments
- Diversify resources, and improve the distribution, management and monitoring of funds.
- Establish a vocational education development fund to manage and allocate funds to vocational institutions.
- Use public and private funds to bridge the gap between strategies and achievements.

**2. Improve the relevance of vocational training by engaging more with the private sector**

- Apply a comprehensive and coherent approach to foster a governance ecosystem that answers real socio-economic needs.
- Create incentives for involving employers in VET policy, including the development of standards and curricula.

**3. Improve the conditions of vocational staff to raise quality**

- Streamline professional standards for vocational teachers and introduce a career and professional development scheme.
- Consider allowing practitioners from the world of work to enter teaching even without formal teaching qualifications.
- Carry out activities to enhance the prestige of the teaching profession.
- Share expertise and best practice among teaching personnel and companies.

**4. Reinforce evidence-based policy making**

- Make regular use of analytical tracer studies with graduates and employers surveys to provide data for better planning and relevance.
- Provide capacity building on data collection and analysis for more targeted policy-making.

**5. Introduce youth-friendly services and training**

- Adapt youth employment policies to make them more user-friendly and appealing.
- Improve youth support measures by tailoring them to the specific needs of different groups, in particular disadvantaged young people.
- Invest in the professional development of staff from the state employment service.
- Streamline professional standards for vocational teachers and introduce a career and professional development scheme.

**6. Strengthen the quality and relevance of early career guidance**

- Strengthen the quality and effectiveness of early career guidance and counselling services at general and vocational institutions.
- Build career education into the curriculum and link it to students' overall development.
- Involve employers and NGOs in the promotion of vocational training and career guidance.

**7. Expand adult education opportunities and collect evidence on participation in adult education**

- Increase adult education opportunities in a lifelong learning perspective.
- Use evidence on participation to improve employability, close mismatch gaps and ensure equity.
- Reinforce the involvement of public providers in adult education.
- Use interactive and participatory methods to spark the interest (especially among young people) in learning and developing skills.
1. Improve the attractiveness of vocational training

2. Improve the relevance of vocational training by engaging more with the private sector

3. Improve the conditions of vocational staff to raise quality

4. Reinforce evidence-based policy making

5. Introduce youth-friendly services and training

6. Strengthen the quality and relevance of early career guidance

7. Expand adult education opportunities and collect evidence on participation in adult education
sectors, i.e. tourism and agriculture, to support closing the gap between the demands of the labour market and the existing qualifications of the workforce (GiZ, 2016).

The Employment Law already acknowledges the responsibilities of trade unions and employers in the development of occupational standards, and the MLSPP has developed secondary legislation that could give an important role to sectoral bodies and foster involvement of the private sector in education reforms. However, in practice, this involvement is hampered by the lack of coordination between employers at the sectoral level. SMEs are not adequately represented, as employer representation takes part via employers’ associations and SMEs are rarely members of these associations. Their low level of participation in industry associations is a challenge and a prerequisite for enhancing their involvement in VET. In general, employers do not perceive VET as a priority issue and often question the allocation of time to this. Trade unions concentrate on working in the field of labour relations and have not yet established themselves as important actors in the VET system. Another problem is with the involvement of stakeholders in school management. Although VET institutions have close relationships with local municipalities, they fail to build strong ties with employers. VET institutions have a minimal role in the implementation of VET reforms, either because of a lack of interest in improvements or lack of capacity. Consequently, reforms started in the MoE do not always bring necessary changes in the VET system.

3.1.2 Mix of policy responses

Although there are numerous problems in the VET system, trends that are being observed in the country’s overall economy within the framework of targeted nationwide reforms have set new requirements for the VET system. The actions undertaken to diversify the economy and develop high value-adding non-oil sectors alongside oil and gas industries have increased the demand for a competitive and professional workforce. From this point of view, VET is assumed to provide advanced workforce training to meet the growing and dynamically changing demand.

Renewal of the regulatory framework and investment in infrastructure

In April 2018, for the first time in the country’s history, a law on vocational education was adopted. This law defines the principles of state policy in the field of vocational education and provides an organisational, legal and economic basis for the VET system. The law introduced three levels of VET: initial, technical and higher technical vocational education. Currently the government is actively working on the development of secondary legislation that covers different aspects of VET, such as development of occupation standards, rules of admission to vocational education institutions, assessment of students and transition from different levels of study.

The EU and UNDP are supporting the establishment of a Regional Industrial VET Competence Centre in Ganja and Regional VET Centre of Excellence for occupations in agriculture and industry (manufacturing) sectors in Jalilabad. The Baku State Vocational Training Centre on Industry and Innovation, which was established by the Cabinet of Ministers of the Azerbaijan Republic on October 11, 2016 and with support from the Korean Economic Development Cooperation Fund, started its activities in September 2019. The new centre in Baku is equipped with the most up-to-date material and technical base and provides training for more than 1 000 students in eight occupations: ICT, automotive, mechanics, industrial installations, electronics, electrical engineering, automation and construction. All of these centres successfully cooperate with industry entities.

The VET Roadmap also envisages establishment of 10 modernised VET centres of excellence across the country, which will provide training in the priority occupations that are in high demand in the labour
market. These centres will have modern infrastructure, materials, and technical and training bases, and a management structure that will be based on public–private partnership. In 2019, construction of two new VET centres began, and five more VET centres will be constructed in 2020. It is envisaged that modernised VET infrastructure will improve the VET image and make it more attractive for learners and parents. However, in reality, many state VET institutions still have inferior infrastructure and lack a material base and equipment for teaching.

**Reviewing VET curricula and coping with teacher and staff training policies**

The SAVE initiated changes in the old curricula and proposed the development of new programmes. A new curriculum template has been developed and tested by the EU VET reform project, but there is a further need to establish a formal process for development of curricula. Until now, 81 modular educational programmes (curricula), 51 modules, 55 new textbooks and 78 modular textbooks have been developed. According to the national Torino Process report, out of 168 programmes in VET institutions, only 36 are competency-based modern curricula. The transition to modern content of vocational education is ongoing and is planned to be completed by 2020.

The State Strategy on the Development of Education is gradually addressing issues to attract qualified teachers and managers. In Azerbaijan, improving the teaching and learning environment is identified as a priority objective both in the Education Strategy and VET Roadmap. In this context, some steps have been taken in recent years to improve the prestige of the teaching profession, the professionalism of teachers, and to attract talented people. The difficulty attracting well-qualified new entrants and to retain them once they have started to teach is also a challenge for the VET system. In 2019, teachers’ salaries were increased more than twice in comparison to the 2018 salary level. The question remains whether this increase will be enough to attract highly qualified professionals. It is widely acknowledged that the formation of an educated and competent person depends on the academic skills, teaching experience and professionalism of teachers. Since 2017, the MoE has been carrying out diagnostic assessment of teaching staff in VET institutions. Plans are underway to develop specific conditions and criteria for selection of pedagogic staff, including identification of those specialities that need involvement of professionals with practical experience.

The SAVE, together with GIZ, has developed a training programme for VET teachers and managers. However, until recently, participation of teachers and trainers in professional development courses, seminars or training has been very limited and focused on theoretical knowledge. The lack of facilities to provide professional development courses for VET teachers and weak interest from enterprises to cooperate with VET institutions in teachers’ development have negatively influenced the professional development of teachers. Also, most of the initiatives for supporting professional development of VET teachers has been financed and organised by international projects.

**Promoting access and participation for all**

Several new initiatives have been introduced to increase access to VET for some vulnerable groups, such as people with disabilities, children without parents, etc. They are admitted to VET institutions without entry competitions, can study free of charge and receive a monthly scholarship of AZN 50. In addition, implementation of inclusive vocational education principles is being piloted at Baku State Vocational Education Centre for Technics and Technologies. To ensure better transparency in admissions to vocational education institutions, in 2016, ASAN service piloted online admission procedure in Baku and Ganja. As of 2018, the VET admissions process is organised through ASAN service centres across the entire country. In the 2018/19 academic year, VET institutions received more than 16 000 applications through the electronic application system.
The MoE also introduced a digital teaching material platform that contains electronic versions of the study books and other materials. A curriculum management information system has also been created and includes online resources. Since November 2018, VET learning materials have also been included in the platform and are accessible for everyone. The MoE has also introduced a digital skills pilot programme at secondary education schools which aims to introduce coding and programming languages as part of the curriculum. VET institutions have also introduced an ICT module for all occupation curricula. Furthermore, in order to facilitate the digital transformation, the government set a priority of modernisation of technology teaching with the involvement of business.

**Policy measures to strengthen coordination mechanisms**

To encourage involvement of the various stakeholders in the development of the education system, four standing committees have been established under the MoE: on education and employment, education and ICT, education content and textbooks, and students and young people. They involve representatives from government agencies, the private sector, education professionals and other relevant stakeholders, and act as consultative bodies. The success, however, will depend on willingness and capacity of different stakeholders to participate, as well as the ability of the MoE to lead the process.

Both the VET Roadmap and VET Law set integration of employers into the VET system as one of the strategic targets, and partnership with employers is one of the key prerequisites for modernising the country’s VET system. Some progress has been achieved in establishing better cooperation between the education system and business sector. The MoE has signed a memorandum of cooperation with several large enterprises (e.g. Azersun and Gilan Holding). The SAVE has initiated more than 100 cooperation agreements between agencies, schools and the private sector, although they are not binding. The National Confederation of Entrepreneurs (Employers) Organizations is implementing a project – Cooperation in the Field of Vocational Education – funded by the German Federal Ministry for Economic Cooperation and Development that aims to strengthen cooperation between entrepreneurs and vocational education institutions to increase employment of young people and support the training of staff in accordance with the needs of the labour market.

Most of the donor-coordinated projects, including EU projects, are piloting WBL as part of newly designed curricula. The British Council, in partnership with the SAVE and the tourism industry, continues implementation of the Access to Hospitality and Apprenticeship Scheme. During the 2018/19 academic year, the programme was implemented in Baku, as well as in the other regions of Azerbaijan (Gabala, Ganja, Qusar and Ismayilli), in three specialities: chef, hotel concierge, housekeeping attendant. GIZ is implementing a project – Establishing Dual-like VET Pilots in Tourism and Agriculture – in Gabala, Ismayilli and Gakh districts. Based on the data provided by the projects, the initiatives that include WBL components have been successful. More than 60% of graduates were able to either remain in the companies as employees or get full-time employment in the sector. By 2025 employers will be fully integrated into the VET system, from development of educational curricula to financing, and this is the target of the VET Roadmap.

**Policy measures to change financial mechanisms**

To increase autonomy of VET institutions, in February 2019, the Cabinet of Ministers approved new statutes for VET institutions that transform vocational institutions into public legal entities and provide more freedom for vocational institutions to provide services, as well as manage finances. Transformation of the institutions into public legal entities is an ongoing process, and it will take time to implement measures in line with the VET Law and new statutes. Overall, even though they can provide various paid education services to individuals and legal entities and receive donations, they
have little flexibility in managing financial resources due to various legal procedures. The poor infrastructure and a weak capacity of teachers limit the ability of state VET institutions to provide quality training and generate additional revenues.

The VET Roadmap sets a goal to build an outcome-based strong financing system which incorporates performance-based rewards for VET institutions and teaching staff to ensure efficient use of funds. The Cabinet of Ministers has approved new rules for financing state VET institutions that determine the requirements for budgetary funds in accordance with the uniform budget classification for the current activities of the state VET institutions operating in Azerbaijan. Within the framework of the EU Technical Assistance project, the guidelines and methods have been developed for budget formation, definition of financial sources, distribution of funds and their management. Furthermore, the VET Law envisages the establishment of the Vocational Education Development Fund, which will manage and allocate the funds among VET institutions in a transparent manner. The fund is due to function under the MoE as a public legal entity and will be supervised by the governing body which will consist of both private and public sector participants. The SAVE has developed a draft project for the establishment of the fund.

3.1.3 Recommendations

**R1: Improve the attractiveness of VET by prioritising it in all investments in human capital development**

The authorities of Azerbaijan are aware of the need to reform VET financing and have set a goal to build an outcome-based strong financing system which incorporates a performance-based rewards mechanism for VET institutions and teaching staff to ensure efficient use of funds. A first step would be to increase the financial resources and optimise their utilisation.

The ETF recommends reviewing the VET financing system by diversifying its resources, developing a costing approach and improving the distribution of funds, their management and monitoring.

a) Increase the share of non-state resources by diversifying the sources of funds to support the national ambitious plans for economic diversification. The idea is to make those who benefit from public policies also contribute to them. This contribution could take many forms such as a training levy or income generation by schools. A first option would be to convince employers about the SAVE proposal to establish a VET Development Fund. Another complementary and quick way to increase VET resources could be the extension of WBL to more priority occupations. The VET private provision, practically non-existent in Azerbaijan, should also be developed and incentivised to contribute to the national efforts to bridge the skills gap for priority sectors.

b) Move towards a more performance-oriented approach for resource allocation. Currently, budget is determined by a simple percentage increase (or decrease) on the previous year’s budget (historic incremental approach) which does not take into account the performance of providers or the achievement of VET policy objectives. Policy makers should consider establishing basic criteria for the allocation of funds based on performance and policy priorities (e.g. enrolment, graduation, placement, continuing training and WBL). This should include a costing methodology to ensure accurate and sustainable budget formation and execution. The cost estimation of the outcomes and activities will not only optimise the use of resources but also improve transparency, accountability and credibility of the policy options.

c) Provide more financial autonomy to VET schools in order to better respond to the local labour market needs, promote innovation, optimise resources and thus enhance attractiveness. This
should go hand in hand with reinforcement of management schools capacity and revisited accountability rules, based on defined priorities and agreed objectives. This autonomy will also reinforce the financial diversification of resources, as schools will be able, where possible, to generate incomes through provision of services and goods. The concept of vocational excellence, being currently implemented through the EU grants in Ganja and Jalilabad, could be a model to be extended.

In summary, the ETF recommends speeding up the implementation of this new financing framework by drawing on the guidelines and methods for budget formation, definition of financial sources, and distribution of funds and their management, which were developed within the framework of the EU Technical Assistance project. This includes the speedy establishment of the Vocational Education Development Fund, which will manage and allocate the funds among VET institutions in a transparent manner. Finally, the planning should take into account the various sources of funds, which are both public and private (including VET private providers’ and donors’ contributions), in order to bridge the current gap between strategies and actual achievements, ensure more visibility and transparency, and make the policy more credible.

R2: Improve the relevance of VET for human capital development through further engagement of the private sector

The VET Roadmap acknowledges that partnership with employers is one of the key prerequisites for taking the VET system of Azerbaijan to a modern level and envisions that by 2025, employers will be fully integrated into the VET system, from development of educational curricula to financing. Indeed, the national Torino Process report states that the current centralised governance is one of the main factors hampering the effectiveness of VET in Azerbaijan.

The ETF recommends a comprehensive and coherent approach to address this issue by fostering the conditions conducive to a multi-level and multi-stakeholder governance ecosystem that steers skills development to answer efficiently the real socio-economic needs and foster attractiveness for young people and enterprises. The national authorities need to create incentives and dedicated policy mechanisms for the involvement of employers in the VET policy cycle. This should range from policy planning to implementation and monitoring, including development of VET standards and curricula in accordance with the real needs of the labour market as well as active participation in the governance of the VET system.

This requires cohesive cooperation and coordination between different actors, not only at national level but also at sectoral and local levels. These governance arrangements can take many forms:

a) At national level: The need to improve coordination of policies for skills development would need the establishment of a high-level, national VET tripartite body/council, composed of a VET authority, employers and employee representatives. Its mandate and role should be discussed and agreed with the objective to design, monitor and assess VET policy in a collaborative way. The ETF recommends setting up a unified, national VET authority with a mandate to steer the overall VET system as a way of improving cooperation between state bodies with stakes in VET and avoid policy fragmentation and overlapping. This authority would be supported by the VET high council in terms of strategic orientation.

b) At sectoral level: Sector skills councils are an effective way to involve employers in policy design. The sector skills councils need to be progressively established as independent employer-led organisations in the priority economic sectors. In addition to their role of skills anticipation,
reducing skills gaps and shortages, and developing and managing occupational standards, the sector skills councils will seek to build a skills system that is driven by employer demand. The MLSPP Occupational Standards Action Plan for 2018–25 could be the framework to implement this initiative. This plan envisages a more active role for sector skills councils.

c) At local level: The regulation for Ganja and Jalilabad centres of excellence that has been recently developed and endorsed by national authorities (in the framework of the EU grants programme) provides more financial and management autonomy to these centres and foresees active participation of employers in school development, both in terms of initial and continuing training as well as validation of non-formal and informal learning (VNFIL). These centres have already established ad hoc memorandum of understanding with many enterprises in the region with the objective to better know and anticipate the skills needs and ensure more WBL. The dynamic created around this initiative needs to be fostered and extended to other schools, through schools networks and collaboration. The MoE and SAVE should take the lead to ensure continuity and sustainability, notably through the adoption of the public–private partnership framework being developed.

The general understanding about the importance of education/business partnerships and cooperation formats can be improved by conducting awareness-raising campaigns for education providers, employers, young people and the broader public, presenting success stories and highlighting the advantages that all parties could gain from this partnership. At local level, very good public–private partnership initiatives have been developed (e.g. in Jalilabad and Ganja) that should be consolidated, structured and extended. The same goes for WBL as a concrete way of cooperation with the private sector.

In summary, the ETF recommends that the national authorities create incentives and dedicated policy mechanisms for the involvement of employers and the private sector in the (re)development of VET standards, curricula and provision in accordance with the real needs of the labour market. Successful human capital development policy requires cohesive public sector coordination, not only at national level, but also vertically with regional and local constituencies, as well as different stakeholders. Employers’ involvement in the design of VET content and the provision of VET can be improved by motivating more companies, in particular SMEs, to participate in sector associations, which in many EU countries, for example, are decisive for VET content development that targets the needs of various industries and sectors of the economy.

**R3: Raise the quality of skills provision by improving the conditions of professional staff working in VET**

The national Torino Process report admits that the lack of a comprehensive teacher development policy in VET has an overall negative impact on the quality of the VET system and thus on its attractiveness. It is also stated that school management needs to be improved in order to support the VET authorities to foster vocational excellence and provide more autonomy to schools.

The ETF recommends improving and streamlining the professional standards for VET teachers and masters and introducing career and professional development schemes for VET personnel. This is about improving and streamlining policies and requirements for teachers and other professional staff in view of promoting a higher professional standard of work and introducing career development schemes with special attention on building relevant professional competences. In the same vein, Azerbaijan could consider allowing practitioners from the world of work to enter teaching even without formal teaching qualifications. It is also important to carry out activities to enhance the prestige of the
teaching profession, including creation of a promotion and career development system. Sharing expertise and best practice among teaching personnel, as well as companies, needs to be further stimulated.

The MoE and SAVE should also accelerate and enlarge development of centres of excellence to ease the process of teachers’ professional development and to allow a better and more relevant recruitment policy. The recent regulation related to vocational excellence needs to be enforced. This needs investment in the existing school management staff, notably through capacity building and awareness-raising, and a more stringent recruitment policy of school managers.

**R4: Reinforce evidence-based policy-making for more targeted skills policy development**

Reinforcing the capacity of public authorities to gather and use evidence in policy analysis, design, planning, monitoring and implementation concerning skills development is an important precondition for measuring the effectiveness and efficiency of the policies.

To enable more targeted skills supply policy development, a wide array of data on VET schools, programmes and graduates is needed. Administrative data on school enrolment exists, but survey data and long-term analysis of VET are lacking. A more targeted policy approach would require regular use of analytical tools such as tracer studies with graduates and employer surveys that would provide data for more sophisticated planning and show if the training is relevant to the labour market.

The shift to more targeted policy-making will require capacity building with regard to data collection and analysis. The newly established Labour Market Observatory under the Ministry of Labour is an important step in this respect and should be adequately resourced with both financial and human resources to ensure sustainability and quality of data analysis.

### 3.2 Prevent the waste of human capital due to youth unemployment

#### 3.2.1 Measuring what matters

International experience shows that youth unemployment and joblessness – particularly when prolonged – are associated not only with long-term negative effects on the employment and wage prospects of young people going through such spells, but also with higher crime rates, overall unhappiness and a series of negative health consequences, both physical and psychological, which tend to grow disproportionately with the duration of unemployment. Long spells of unemployment also erode the skills of young workers, reduce their employability, cause a permanent loss of human capital and make unemployment persistent (O’Higgins, 2010).

The government acknowledges that the higher rate of unemployment among young people is one of the main challenges observed in the labour market (Employment Strategy 2019–2030). Although youth unemployment has been steadily decreasing over recent years, it is still much higher than overall unemployment. The youth unemployment rate declined from 14.9% in 2010 to 12.7% in 2018, which is 2.6 times more than the total unemployment rate. Unemployment is higher among young females than young males (14.7% and 11% respectively in 2018). The percentage of young NEETs is also high and reached 23% in 2017. Non-participation is predominant among women.

In general, young women find themselves in a more vulnerable situation in the labour market than young men. This is largely influenced by the perception of gender roles in a society that downgrades the importance of professional employment for young women and makes them unreliable and ‘second-rate’ in the eyes of employers. As a result, young women seeking employment are subject to
double discrimination: by gender and by age (Baskakova, 2012). Another important factor is a persistently high level of student segregation by training speciality and profession, as girls, in general, pursue the narrow scope of educational fields. This later restricts their employment opportunities in the private sector and limits access to new, highly paid professions. Parents commonly play a strong, decisive role in a girl's choice of vocational or higher education. Girls are sometimes strongly encouraged by parents to select a field based on limiting considerations concerning a 'suitable' job which, first, is 'appropriate for women' ('teacher' being the most common), and, second, allows women to perform a full workload of family responsibilities (UNDP, 2018).

When seeking a job, young people face many more difficulties than adults. At the start of their career, they often lack both work experience and experience in job-seeking. In general, young people who cannot obtain places at university after secondary education, mainly men, start looking for jobs. However, many of them do not possess skills and have little or no practical experience that is required by employers, and they also have relatively high reservation wages (Hajiyev, 2017). Thus, many young people are often trapped in a vicious cycle where it is hard to get a job without work experience while it is hard to gain practical experience if employers do not employ without it. They also face difficulties finding jobs relevant to their qualifications and location.

A shortage of career guidance and professional orientation services leads to long periods of job search. Moreover, recruitment practices are biased towards hiring relatives or acquaintances. According to the SSC’s Labour Force Survey in 2016, the majority of young people in Azerbaijan found their jobs through friends and relatives (35.4%) and through public advertisements (29.4%). Less often, young people use public employment services and private employment agencies. Job search support from educational institutions and public employment services is rather limited (8.9% and 8.4% respectively) (ETF, 2018). This situation partially reflects the traditional paradigm of trust in society, as people rely on their family and friends rather than on state institutions.

Thus, a significant number of young people are underemployed, unemployed, seeking employment or between jobs without the possibility of personal and professional development. Moreover, the quality of jobs accessed by young people remains a cause for concern as they are overrepresented in informal, low-paid and low-skilled jobs, which means they do not have access to social security, do not enjoy basic labour rights and do not have prospects for career advancement. During these periods without decent work, the skills young people acquired as students are eroding and declining in economic value.

At the same time, young people are more versatile and better educated than the older populations. They are also more mobile in the labour market, including self-employment and entrepreneurial initiatives, and demonstrate greater capacity to adapt to changes in the world of work, and to develop skills for new conditions and technologies.

From one side, advancements in technology and the changing nature of work are providing new opportunities for employment and entrepreneurship, but from the other, they are putting many traditional jobs at risk and creating more demands for ongoing skills development to remain competitive in the labour market. However, access to advanced technologies and relevant training is uneven, resulting in the exclusion of vulnerable young people. This requires policy measures to ensure that young people get support in their transition from school to work by providing them with the appropriate skills.
The ETF mapping of youth policies showed that there are constraints in terms of outreach of youth target groups (ETF, 2018). The number of measures directly supporting youth transitions is rather limited. Moreover, the number of beneficiaries in the existing youth-related programmes is very low, pointing to weak coverage and limited labour market impact. For example, in 2018, the SES vocational training courses were provided to 2,559 persons, almost half of which were young people. However, this number seems rather small considering the actual training needs of young people. They have to wait a long time to get involved in vocational training and that has a further negative impact.

### 3.2.2 Mix of policy responses in place

#### National targets and policies to reduce the proportion of NEETs

In line with the Decent Work Programme for 2016–2020 signed with the International Labour Organization (ILO), important steps are being taken to improve youth employment. The state programme Azerbaijani Youth 2016–2021 is focused on youth education and employment, and includes skills development, career guidance and entrepreneurship. However, as a framework document it does not provide concrete activities or indicators. The important step forward is the new Employment Strategy that establishes clear national targets. The Employment Strategy adopted in 2018 sets important targets for young people, indicating that by 2030, the proportion of young NEETs, i.e. those aged 15 to 24, should be reduced to 15%. In 2017, the figure was 23%.

The Law on Employment (2018) introduces an economic and organisational basis for state policy in the field of employment promotion and establishes the integration of young people into the labour market as one of the goals of active labour market programmes (ALMPs). The MLSPP is actively working on the development of secondary legislation to ensure effective implementation of the law. At present, the SES, under the MLSPP, implements ALMPs through its 80 employment centres and three regional vocational training centres (Baku, Nakhchivan and Goychay). The SES registers unemployed persons and provides employment services to jobseekers. In 2018, a total of 119,230 jobseekers applied to employment offices for assistance in job search, of which 51,774 were provided with a job. However, the registration rates at the employment centres are low and the outreach of services is limited. The SES deals with a small fraction of potential beneficiaries, as many young people, such as NEETs and those who live in rural areas, usually do not register. There is a certain stereotype that a good specialist will not apply to employment centres. Thus, employment centres usually serve young people with lower skill levels, i.e. general education graduates.

In 2019, the MLSPP launched the new employment subsystem as part of its centralised electronic information system to promote more transparent and accessible employment services. The subsystem allows provision of employment-related services electronically, without contacting an employment centre. It also established a vacancy bank as an electronic information resource for new jobs. It provides real-time access to information on employment services, including information about employment opportunities for jobseekers.

#### Career guidance for young people as one of the key policy measures

The Youth Employment Programme and associated Youth Fund of the MLSPP were launched in April 2019. The aim is to assist young people in successful career development (finding a job), creating additional jobs (especially in the regions) and increasing competition in the labour market. Vocational and higher education graduates under the age of 29 will be able to participate in the programme. They will be awarded a minimum one-year employment contract and will be funded by the Youth Fund for a certain period of time. There will also be opportunities to participate in career planning activities and vocational training. Preference will be provided to young people from socially vulnerable groups.
(persons with disabilities, IDPs, etc.), those living in the regions and those who have no work experience.

The Youth Foundation under the President of the Republic of Azerbaijan is a non-profit legal entity ensuring activities in the science, education, culture and other social fields concerning youth policy. It functions in cooperation with government and local self-government bodies, mass media, NGOs and international organisations. The Foundation implements grant completion for local NGOs working with young people aged 16 to 29, supporting participation at international conferences and events. Talented young people with special needs for social protection will also receive financial support from the Foundation to cover their tuition costs. The main criteria are the young student’s attendance, educational performance, and relevance of the applicant to the vulnerable group. Students from vulnerable groups who are aged 16 to 29 and who were admitted to VET institutions can apply to these funds as well.

The Youth Foundation established Youth Development and Career Centres in Baku and the regions so that young people can get training on various topics related to their personal and professional development. Some of these centres, especially those in the regions, will also provide vocational skills training. President Ilham Aliyev signed a decree on additional measures to support the activities of the Youth Foundation, and AZN 4 million has been allocated by the Presidential Reserve Fund envisaged in the 2019 state budget to the Youth Foundation in order to create and maintain representative offices of the Youth Development and Career Centres at the Heydar Aliyev Centres operating in cities and regions of the country. The Foundation is planning to establish about 50 Youth Development and Career Centres all over the country by April 2020.

To further improve services, in June 2019, the Cabinet of Ministers approved new rules on provision of career counselling services. The rules establish the scope and procedure for vocational counselling services, with the aim to provide support and information about job and training opportunities available for vocational and professional education, and measuring interest and socio-psychological characteristics of young people (students and pupils of educational institutions), employers and unemployed people. The SES is also involved in provision of career guidance activities to young people who are still in education. For example, the SES organises job fairs, including events at the leading universities, for students and graduates under the motto ‘the first step in your career’ to help young people to establish initial contact with employers and to promote their integration into the labour market. The SES has also been organising interactive workshops on the role of parents in choosing a profession for their children, with participation of professional psychologists and vocational guidance experts at almost all city and district secondary schools. In 2018, a total of 118 138 young people were involved in career guidance activities. Overall, career guidance services are limited and concentrate more on short-term employment options rather than on longer-term career development and career planning.

The SAVE has identified responsible staff in secondary schools to create links to VET institutions. Also, VET institutions organise open days for secondary school pupils and their families to inform them about VET programmes and relevant occupations. The SAVE Department on Career Guidance and Cooperation develops international cooperation programmes, cooperates with employers to enhance the effectiveness of VET, and takes actions to promote VET and awareness-raising about VET.
Policies to improve participation of young people in higher education programmes

Access to higher education is a very important element of human capital development policy when it comes to young people. After joining the Bologna Process in 2005, Azerbaijan has put in place a number of reforms to revamp the higher education sector according to European standards. Some of these reforms have benefited private institutions. For instance, for the first time in 2010, private universities became eligible for the state-funded voucher programme where a high-achieving student could select private universities and have her/his education financed by the government. As evidenced by the Action Plan on the Implementation of the State Strategy on Development of Education adopted in 2015, the government aims to transition from a state-controlled higher education system to a self-regulated higher education market where students and HEIs define the supply and demand for tertiary education. The introduction of fees for such admissions tests, similar to the ones in the United States administered by the Educational Testing Service such as SAT, is seen as part of the movement to liberalise higher education (Abbasov and Jarafli, 2018).

Some notable improvements are now evident. The gross enrolment rate in tertiary education was up to 27% (4% in vocational education and 23% in higher education), although still well below its neighbours Georgia (51.8%) and Armenia (51.2%) (UIS, 2016). Overall, despite attempts to modernise and diversify the tertiary education system, it still remains highly state-controlled even to an extent that the exact number of places at each HEI is approved by the Cabinet of Ministers on an annual basis. Therefore, considering the involvement of several key stakeholders – Cabinet of Ministers, MoE, State Examination Centre, along with individual HEIs – adopting new reforms and instituting change in higher education has proven to be a difficult task (Abbasov and Jarafli, 2018).

3.2.3 Recommendations

R5: Introduce services and training offers in support of labour market participation which are more youth-friendly

Youth unemployment is an issue in Azerbaijan. Young people constitute a diverse population that include various vulnerable groups such as young women, low-skilled youths, those who dropped out from school, those who experienced difficulties in entering the labour market due to a lack of work experience, those who reside in rural areas, and IDPs.

In line with the country efforts for youth participation support (Decent Work Programme for 2016–2020 with the ILO, Youth 2016–2021, ALMPs, self-employment initiatives, etc.), the ETF recommends ensuring more coherence of and adjusting the youth employment policies so that they include services and training offers that are more user-friendly and appealing for young people, thus making the focus on youths an integral part of the country’s mainstream labour market policy.

Specifically, the ETF recommends improving youth support measures by tailoring them to the specific needs of different groups, in particular disadvantaged young people. The ETF also recommends investing in the professional development of staff from the SES, to prepare them for the complex task of target group outreach and diverse needs and expectations.

R6: Strengthen the quality and relevance of early career guidance in secondary education and VET in particular

The national Torino Process report recognises that one of the factors that impedes the entry of VET graduates into the labour market is their choice of occupation. State programmes encourage development of industry, construction, transportation, ICT and other sectors but either few students
enrol in these occupations or there are few enterprises where they can get practical knowledge or employment upon graduation.

Many young people, particularly those from poor and disadvantaged backgrounds as well as rural areas, struggle to find decent employment because they lack guidance and information about the labour market. Providing young people with career guidance that is based on high-quality information about labour market prospects can help them to choose education and professional career paths and support them in better matching their skills and competences as well as aspirations.

The ETF recommends strengthening the quality and effectiveness of early career guidance and counselling services at general and VET institutions, including building career education into the curriculum, linking it to students’ overall development and offering guidance in career planning throughout secondary schools. Employers and NGOs (in addition to SAVE and the Labour Market Observatory) should be involved in the development of trades and the promotion of VET and career guidance. Thus, career guidance can be used as a preventive measure to improve the labour market outcomes of young people.

3.3 Expand the human capital development opportunities for adults

3.3.1 Measuring what matters

Adult learning has never been more important and urgent than it is today. The demand for it relates to adults that are in need of being trained and retrained in order to cope with the ever-changing world of work and is usually described in terms of age, gender, educational attainment, employment status and job characteristics.

At present, there are limited opportunities for adult learning. Problems include the lack of adequate adult training facilities and offers, especially outside bigger urban centres. Non-formal education and training leading to nationally recognised certificates is carried out by a limited number of training centres functioning within several line ministries (e.g. the MLSPP, the Ministry of Economy), a few big companies (e.g. SOCAR Azersun), professional associations (e.g. Banks Association) and specialised independent training centres. According to the existing legislation, all the training programmes leading to certificates need to be approved by the MoE (GIZ, 2016). In Azerbaijan, the issue of adult learning has not been sufficiently addressed.

3.3.2 Mix of policy responses in place

Skills matter for self-employment

The important aim of Azerbaijan’s employment policy is to encourage the gradual transition from the passive assistance system to a self-employment system that would prevent dependence of low-income people and stimulate entrepreneurial activities. This is done by implementing a large-scale self-employment programme that is aimed at creating opportunities for the unemployed to establish small businesses, in particular by providing low-income families with various assets (goods, materials and livestock), as well as training in entrepreneurship. In 2018, a total of 7 267 unemployed people were involved in the programme, including 1 174 young people. Currently about 75% of businesses established through the self-employment programme are in farming.

As interest in the programme is very high (in the first half of 2019, the programme received about 45 000 applications), in 2019, it was expanded, involving more than 8 500 people with a particular attention to vulnerable groups, including young people. In June 2019, the MLSPP, the SES and the
UNDP announced the start of a self-employment programme for persons with disabilities. The aim is to support 500 unemployed persons with disabilities who have the desire and vision to start their own business. With support from the new World Bank’s Azerbaijan Employment Support Project, it aims to increase effectiveness of the self-employment programme by improving targeting and introducing complementary support services to increase the likelihood of business survival in the medium to longer term.

Although the overall implementation of the self-employment programme is considered to be successful and it has been significantly expanded since it started in 2016, its thorough evaluation and cost–benefit assessment has not been implemented yet. Lack of a robust system for tracking the beneficiaries after the services provided is an overall weakness in the implementation of support measures by the SES. This might be linked to the weak culture of monitoring and evaluation. The existing monitoring activities are limited to measuring participation in the training programmes, with little attention being paid to the quality. There is a need to introduce regular monitoring of key indicators (both input and output) to assess the performance of the different employment programmes implemented by the SES, particularly with a focus on those where training measures are a significant part of it.

Promotion of continuing VET and adult learning
In June 2019, the Cabinet of Ministers approved new rules for the organisation of vocational training for jobseekers and unemployed people that provide grounds for the involvement of VET institutions in training provision outsourced by the SES. In agreement between the SES and SAVE, vocational institutions and VET providers, under the responsibility of the MoE, also started to provide short-term courses from May 2019. The first step was to pass the VET Law, which established the legal basis for the enhanced role of VET in the provision of continuous vocational education by allowing VET institutions to provide short-term courses for up to six months. These courses can also be organised upon the request of companies on the basis of tuition fees being paid.

Technological change makes it harder to anticipate which job-specific skills will thrive and which will become obsolete in the future. Thus, the ability to adapt quickly is increasingly valued by the labour market. At present, analysis of the labour market in terms of occupations is not developed enough to inform corresponding VET policies, and in particular the needs for continuing VET. The importance of labour market needs analysis has been confirmed by the positive experience of two priority centres (Jalilabad and Ganja). Building on the labour market surveys carried out in 2017, both centres now offer courses in six new occupations in line with labour market needs. The new courses, which cover such growing industries as wine making, and tea and strawberry production, have attracted new students’ attention. Enrolments rose by 22% in Jalilabad and 9.5% in Ganja (UN, 2019). These types of courses could be particularly relevant for adult learners.

The Council on State Support to NGOs under the Auspices of the President of the Republic of Azerbaijan was established in 2007. Each year the council conducts a competitive process for grant allocation for various important social, cultural and public topics for NGOs. The council is planning to put VET on its list of topics for future grant allocations which will allow local NGOs to apply for and implement projects related to raising awareness about this field among various groups of people in Baku and the regions.

Measures for validation of competences acquired through non-formal and informal learning
At present, although a document certifying general secondary, specialised secondary or higher education is required for employment depending on the complexity of the profession, a document
certifying vocational qualifications is not required. This has resulted in the fact that most people actively engaged in the labour market have no document proving their qualifications. The VET Roadmap acknowledges that the requirement for a vocational qualification certificate, a key quality-certifying indicator, is one of the main reforms that would transform the attitude towards vocational education and would have a positive impact on work safety and increase labour productivity and competitive production. It sets up a strategic target to ensure that after 2025, a vocational qualification could be compulsory for employment.

The Action Plan on the Implementation of the Education Strategy (2015) establishes a task to introduce a new system for the validation of competences acquired through non-formal and informal learning. Also, the recently adopted Employment Strategy determines the priority of development of VNFIL and establishment of the workforce certification system, and the Azerbaijan National Qualifications Framework (AzNQF) provides the basis for the development of VNFIL. However, according to the Education Law, VNFIL is only foreseen in the vocational education pillar. The SAVE is in charge of developing VNFIL and its legislative base. It does this in cooperation with the MLSPP. The UNDP supports the development of a legal framework and pilots new mechanisms for recognition of prior learning in the Ganja VET Competence Centre in the framework of the EU grant project. Recently, there has been greater openness towards VNFIL and there is a growing interest in public debate in relation to several high-profile events and articles in the press.

In July 2019, the President of Azerbaijan signed a decree to establish the National Observatory on Labour Market and Social Protection Affairs under the MLSPP (elsewhere referred to as the Labour Market Observatory). It is envisaged that the observatory will collect, analyse and publish information on the supply and demand for occupations and skills that will help students and jobseekers to choose fields of study and invest in skills to enhance their employment and wage prospects. As the key role of skills development is to meet the skills needs for catalytic sectors that would enable economic transformation and move workers from low-productivity sectors, there is a need for a forward-looking approach to understand the future skills needs, particularly in the application of innovative content such as computer science, natural sciences and engineering, including robotics, artificial intelligence and nanotechnology.

**AzNQF and occupational standards**

An important recent achievement was the adoption of the AzNQF (2018). This step supports Azerbaijan’s convergence with the European higher education area and is aligned with the European qualification’s framework for LLL. The AzNQF is closely linked to other policy initiatives, including the reduction of informal employment, employment promotion and labour mobility. However, to fully implement AzNQF, there is a need for a more systemic approach. From 2018, the shift to a modern curriculum has started by formulating new programmes based on occupational standards and involving employers in the curriculum development process. The legal status of occupational standards has been strengthened by the AzNQF decree, the VET Law, the Employment Strategy 2019–2030 and a law on the Use of the Budget of the Unemployment Insurance Fund for 2019. Secondary legislation has been drafted and adopted to establish a new workflow for developing standards.

Until now, the MLSPP, together with representatives from companies and social partners, has developed 289 occupational and 63 qualification standards for priority occupations. Occupational standards have been developed for agriculture, energy, construction, manufacturing, tourism trade, business and individual services, ecology, transport, and finance and insurance. It is envisaged that budget allocated from the Unemployment Insurance Fund will be used to upgrade existing
professional standards in line with the AzNQF, as well as to develop other new occupational and qualification standards that are considered an economic priority. Occupational standards are generally seen as the new starting point for developing state educational standards, but there is currently no system-wide use of them.

The ETF carried out an evaluation in 2018 of the use of occupational standards which showed that they can be better used by education authorities. Different approaches have been tested to involve representatives from the world of work more in renewing vocational and higher education standards, but so far a more consolidated new approach is only coming into place, slowly with the support of EU and donor projects. The donor support can accelerate some of these developments, but in the end, much depends on institutional capacity in the country. It is important to clarify the coordination mechanisms, and to empower sectors and training providers to start playing a more active role in standard and curriculum development.

Policies to enhance entrepreneurial skills

Azerbaijan recognises the important role of entrepreneurial skills in fostering development of SMEs. Stimulating entrepreneurial ways of thinking and encouraging entrepreneurship are the priority goals indicated in the strategic roadmaps. The SME Roadmap further sets out a number of policy actions to promote entrepreneurship. According to the Action Plan 2018–2020 approved by the Ministry of Economy, the Small and Medium Enterprises Development Agency (KOBIA) will organise special training with the participation of SME subjects in promoting entrepreneurial thinking in the vocational education institutions, supporting organisation of manufacturing training and manufacturing practices in accordance with the concept of dual VET. In 2018, a structured policy partnership led by the SME Agency’s Lifelong Learning Commission was established to coordinate activities of government and non-government actors on entrepreneurial learning.

To promote entrepreneurial learning in VET, in 2018, an entrepreneurship module was introduced as a mandatory module in all VET levels. However, it is not implemented in general education. Materials, guidebooks and online resources focus on financial and economic literacy, (business) planning, idea creation, market analysis and legal aspects. Practical entrepreneurial experience is compulsory in selected VET schools, and secondary vocational school programmes in some specialities include 14 weeks of entrepreneurial practice. Also, the SAVE, together with other relevant stakeholders and non-government institutions, is organising events, workshops, competitions and field visits of VET students to encourage entrepreneurship of VET students. It also launched a new mentoring programme for providers of vocational education aimed at building their capacity to promote entrepreneurship and entrepreneurial thinking.

3.3.3 Recommendations

The new legal basis is a positive step towards more opportunities for adult learning. However, the forms and methods of continuing vocational education need further improvement in terms of their content and methods of training, their relevance to the labour market needs, and more importantly making them suitable for adults. Interactive and participatory methods are especially relevant in gaining the interest of young people in learning and development of skills. Also, the use of new technologies – from distance learning to digitalised teaching and learning materials – has the potential to attract more adults and young people.
R7: Prioritise the expansion of adult education opportunities and the collection of evidence on participation in adult education

The Education Strategy establishes LLL as a priority. The Education Law includes reference to non-formal and informal learning and a wide spectrum of qualifications for adult learning. Furthermore, the VET Roadmap and VET Law set priority directions to provide a relevant legal basis for organisation of adult education and further training courses in VET institutions, and define formal, non-formal and informal vocational education. The development of this legislative framework is ongoing.

In line with the above, the ETF recommends prioritising the expansion of adult education opportunities, in a LLL perspective, and the collection of evidence on participation in order to improve employability, close the mismatch gaps and ensure more equity. This improvement should cover the content and methods of training as well as their relevance to the labour market needs.

This could include reinforced involvement of public providers in adult education and better coordination of the involvement of private providers. Developing interactive and participatory methods will be relevant in gaining the interest of young people in learning and development of skills. Also, the use of new technologies (from distance learning to digitalised teaching and learning materials) has the potential to attract more potential beneficiaries.
In the last few decades, Azerbaijan has been experiencing significant demographic changes, reflected in several ways: a change in the structure of the population and demand for new jobs, massive urbanisation of major cities, and migration in its various forms.

The gradual shift to a new economic growth model that is able to meet major challenges of job creation and the reduction of social and regional inequalities will require upgrading and making adjustments to human capital in the country. The real challenge is to develop human capital that is prepared to adapt to continuous evolutions.

Coping with the human capital needs of today and planning for policies that will ensure that global trends and drivers are enjoyed by all individuals is a challenging issue. In Azerbaijan many young people experience extended periods of unemployment, which can potentially hinder their skills development, future employability and earning capacity. A long period of unemployment spells risks leading to youth labour market detachment, especially among young women and men seeking their first job. The transformation of the world of work is an ongoing process, and it poses a significant challenge for businesses to cope with the skills they need. Bridging the divide, preparing young people for the world of tomorrow and making sure that people can be upskilled throughout the course of their life requires rethinking carefully how to deal with human capital and modernisation of education and training systems.

The government of Azerbaijan has put nurturing human capital as a key priority and developing new skills and capabilities of citizens is high on the agenda. A key focus is to proceed with structural and systemic change with sustained policy measures on quality and inclusiveness at all levels of education and training, both initial and continuing.

The actions undertaken to diversify the economy and to develop high value-adding activities in non-oil sectors alongside oil and gas industries have increased the demand for a competitive and professional workforce. From this point of view, the VET sector is assumed to provide advanced workforce training to meet the growing and changing labour market needs.

The skills development system should better support the national priority of economic diversification by addressing the shortage and waste of skills and further develop adult education in a LLL perspective. A shift to more targeted policy-making requires reliable data and sufficient data analysis. The newly established Labour Market Observatory under the Ministry of Labour is an important step in this respect and should be adequately resourced.

The VET Roadmap acknowledges that partnerships with employers is one of the critical prerequisites for taking the vocational education system to an advanced level and envisages that by 2025 employers will be fully integrated into the VET system, from the development of educational curricula to financing. The VET Roadmap envisages the establishment of 10 modernised VET centres of excellence across the country, which will provide training in the priority occupations that are in high demand in the labour market. Through further engagement of the private sector, the relevance of VET for human capital development is expected to improve. There is a high potential for promoting WBL in Azerbaijan, especially in the highly employment-relevant sectors, i.e. agriculture and tourism, that can support closing the gap between the demands of the labour market and the existing qualifications of the workforce.
## ANNEX 1. SUMMARY OF RECOMMENDATIONS

<table>
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<tr>
<th>Human capital development and use problem</th>
<th>Recommendations</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Resolving the problem of skills shortages due to low participation in Vocational Education and Training (VET)</strong></td>
<td>R1 Improve the attractiveness of VET by prioritising it in all investments in human capital development</td>
<td>Review the VET financing system by diversifying its resources, developing a costing approach and improving the distribution of funds, their management and monitoring. This will include establishment of the Vocational Education Development Fund, which will manage and allocate funds among VET institutions in a transparent manner. The planning should take into account the various sources of funds, both public and private (including VET private providers’ and donors’ contributions), in order to bridge the current gap between strategies and actual achievements, ensure more visibility and transparency, and make the policy more credible.</td>
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<td></td>
<td>R2 Improve the relevance of VET for human capital development through further private sector engagement</td>
<td>Apply a comprehensive and coherent approach to address this issue by fostering the conditions conducive to a multi-level and multi-stakeholder governance ecosystem that steers skills development to answer efficiently the real socio-economic needs and foster attractiveness for young people and enterprises. The national authorities need to create incentives and dedicated policy mechanisms for the involvement of employers in the VET policy cycle. This should range from policy planning to implementation and monitoring, including development of VET standards and curricula in accordance with the real needs of the labour market as well as active participation in the governance of the VET system.</td>
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<td></td>
<td>R3 Raise the quality of skills provision by improving the conditions of professional staff working in VET</td>
<td>Improve and streamline the professional standards for VET teachers and masters and introduce career and professional development schemes for VET personnel. Azerbaijan could consider allowing practitioners from the world of work to enter teaching without formal teaching qualifications. Furthermore, it is recommended to carry out activities to enhance the prestige of the teaching profession, including creation of a promotion and career development system. Sharing expertise and best practice among teaching personnel as well as companies needs to be further stimulated.</td>
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<td></td>
<td>R4 Reinforce the evidence-based policy-making for more targeted skills policy development</td>
<td>Make regular use of analytical tools such as tracer studies with graduates and employer surveys that would provide data for more robust planning and show if the training is relevant to the labour market. The shift to more targeted policy-making will require capacity building with regards to data collection and analysis.</td>
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<td><strong>Prevent the waste of human capital due to youth unemployment</strong></td>
<td>R5 Introduce services and training offers in support of labour market participation which are more youth-friendly</td>
<td>Enhance coherence and adjust the youth employment policies so that they include services and training offers that are more user-friendly and appealing for young people, thus making the focus on youth an integral part of the country’s mainstream labour market policy. In particular, improve youth support measures by tailoring them to the specific needs of different groups, in particular disadvantaged young people. Furthermore, invest in the professional development of staff from the state employment service, to prepare them for the complex task...</td>
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<td>R6 Strengthen the quality and relevance of early career guidance in secondary education and VET in particular</td>
<td>Strengthen the quality and effectiveness of early career guidance and counselling services at general and VET institutions, including building career education into the curriculum, linking it to students’ overall development and offering guidance in career planning throughout secondary schools. Employers and non-governmental organisations (in addition to the State Agency for Vocational Education and the Labour Market Observatory) should be involved with the development of trades and the promotion of VET and career guidance.</td>
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<td><strong>Expand the human capital development opportunities for adults</strong></td>
<td><strong>R7 Prioritise the expansion of adult education opportunities and the collection of evidence on participation in adult education</strong></td>
<td>Prioritise the expansion of adult education opportunities, in a lifelong learning perspective, and the collection of evidence on participation in order to improve employability, close the mismatch gaps and ensure more equity. This improvement should cover the content and methods of training as well as their relevance to the labour market needs. This could include reinforced involvement of public providers in adult education, and better coordination of the involvement of private providers. Developing interactive and participatory methods will be relevant in gaining the interest of young people in learning and development of skills.</td>
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ANNEX 2. EDUCATION AND TRAINING SYSTEM OF AZERBAIJAN

The Law on Education establishes the stages and levels in the education system in Azerbaijan. It consists of five stages: preschool, general, vocational, secondary special and higher education. Middle-level professional education is provided at two stages: vocational and secondary special.

**FIGURE A1: VOCATIONAL EDUCATION AND TRAINING WITHIN AZERBAIJAN’S EDUCATION SYSTEM**

Vocational education provides vocational training of skilled workers in different occupations. It has three levels: initial, technical and higher technical vocational education. Formal VET is provided by public and private vocational education institutions. EQF refers to European Qualifications.
There are three types of vocational education institutions: vocational school, vocational lyceum and vocational education centre. Currently, there are 76 VET institutions: 24 vocational education centres, 16 vocational lyceums, 23 vocational schools, nine vocational schools located in prisons, two private vocational schools, one vocational training centre and one continuing vocational training centre. There are 1,167 teachers of general education subjects, 634 teachers of occupational subjects and 1,266 vocation training masters.

Secondary special education provides vocational training of specialists in different occupations in parallel with complete secondary education. Secondary special education is conducted mainly in colleges and in the relevant departments of higher education institutions, and ends with the award of a sub-bachelor degree.

Higher education provides academic education and training of highly qualified specialists and scientific and scientific-pedagogic staff. Admission to higher education is carried out on the basis of the National Admission Test, which is organised by the State Students Admission Commission. Those who have obtained the Certificate of Complete Secondary Education can participate in the test. In 2018, admission rules were amended, and the graduates of secondary special education institutions were allowed to enter higher education without taking an admission test on the basis of the Certificate of Secondary Special Education. Credits earned by graduates (sub-bachelors) are considered in the relevant higher education programmes.

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11 The European Qualifications Framework (EQF) is a translation tool that helps understand and compare qualifications awarded in different countries and by different education and training systems. Its eight levels are described in terms of learning outcomes: knowledge, skills and competences.
# ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>ALMP</td>
<td>Active Labour Market Programme</td>
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<tr>
<td>ASAN</td>
<td>State Agency for Public Service</td>
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<tr>
<td>AZN</td>
<td>Azerbaijan manat (currency)</td>
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<tr>
<td>AzNQF</td>
<td>Azerbaijan National Qualifications Framework</td>
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<tr>
<td>EaP</td>
<td>Eastern Partnership</td>
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<tr>
<td>ETF</td>
<td>European Training Foundation</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>EUR</td>
<td>Euro</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HEI</td>
<td>Higher Education Institutions</td>
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<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
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<tr>
<td>IDPs</td>
<td>Internally Displaced Persons</td>
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<tr>
<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>ISCED</td>
<td>International Standard Classification of Education</td>
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<tr>
<td>LLL</td>
<td>Lifelong Learning</td>
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<tr>
<td>LMO</td>
<td>Labour Market Observatory</td>
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<tr>
<td>MoE</td>
<td>Ministry of Education</td>
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<tr>
<td>MLSPP</td>
<td>Ministry of Labour and Social Protection of Population</td>
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<tr>
<td>NEET</td>
<td>Not in Education, Employment or Training</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organisation</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PIRLS</td>
<td>Progress in International Reading Literacy Study</td>
</tr>
<tr>
<td>PISA</td>
<td>Programme for International Student Assessment</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>SABER</td>
<td>Systems Approach for Better Education Results</td>
</tr>
<tr>
<td>SAVE</td>
<td>State Agency for Vocational Education</td>
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<tr>
<td>SES</td>
<td>State Employment Service</td>
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<tr>
<td>SME</td>
<td>Small and Medium-sized Enterprise</td>
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<tr>
<td>SSC</td>
<td>State Statistical Committee</td>
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<tr>
<td>UIS</td>
<td>UNESCO Institute for Statistics</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
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<tr>
<td>VET</td>
<td>Vocational Education and Training</td>
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</tbody>
</table>
VNFIL  Validation of Non-Formal and Informal Learning
WBL  Work-Based Learning
WEF  World Economic Forum
REFERENCES


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IMF Country Report No. 19/301


Sadigov, T., A clash of cultures: how rural out-migrants adapt to urban life in Baku, Caucasus Analytical Digest, No. 101, 26 January 2018.


Useful website resources for up-to-date statistics:
Eurostat: https://ec.europa.eu/eurostat/
World Bank, Enterprise surveys: http://www.enterprisesurveys.org/
Where to find out more

Website
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